9-26 - 67

NEW HARDWARE LOG (OLD ONE FULL)

CURRENT STATE OF MACHINE

CORE - SOME SMALL Bugs WITH CORE 3 AND SOMETIMES 0-1-2 MAY ALL BE DUE TO LA

CPA - SEEMS TO RUN FINE ALTHOUGH THE WIND MACHINES (OURS & MOTHER THE GREAT) HAVE BEEN ILL FOR THE LAST TWO WEEKS

DISPLAY - ?

DISC - HAS BEEN IN TEST MODE (SELF) FOR TWO 1/2 DAYS NOW AND IT HASN'T RETURNED AT UE YET LET WAIT AND SEE HOW THE INTERFACE WORKS

Randy
9-26-67 2325

DTAS: appears to give read errors.
I used merge to copy a file from DTAS; and
it terminated on two successive occasions with
"INPUT ERROR". I then put the tape on DTAB;
and won Sob.

9-27-67  4:30  2000

Improved grounding on 167 in area
of fibroscope line drivers and terminators
should eliminate glitching of 164 pulses.

2010  27 Sep 67

Took disk off self-test. No
error.

2030  27 Sep 67 Ran Bare machine diagnostic
ground problem appears solved. Spikes are
now <100 mV. Got one READ error.
Tried again. Wouldn't repeat.

2105  27 Sep 67 Tested DP PE's code. Keypad still
seem to work
22.45  27 Sep 67
  started testing disk again with Smith's
  Core Machine Diagnostic.

23.00  167 seems to have spread data over
  lower core on read-out deck
  167 looks innocent.
  JB DN  CHC 3
  MC WR

Perhaps it went well on an earlier transfer.

23.12  Got Read Error on TEST 7:
  ERROR.

  Dutch suspect checked timing on disk
  no problems found timing OK

23.50  Restarted test 7. Ran OK

23.56  Got another program Wipe-out

167
  JB DN  CHC 3  MC WR
  WC = 0  MA = 12522
  123 123

This is correct for end of
  transfer if transfer in progress

23 Sep 67  0005  Restarted test 7
  got read error  Read 147
  DDT was wiped out

0012  Tried again Same trouble
  Giving up for night
23 Sep 67, 0300 AM

Getting random errors - am pretty certain it's not in my programs. E.g. the following is a typical example. First such error occurred about 1:30 am. The first example (unchanged) used to run before this (see underneath) 0:45 AM

RUN DTAS REDLST 48

= C

REE

(BEGIN N DTAS INT)

* 

* 

ERROR

CONT? Y

* 

*** IN DTAS DATA

$2M ALREADY DEFINED.
BEGIN N DTAS INT

* 

* 

(EBM UBEAVA DEFINED)

(MADE ILLEGAL MEMORY REFERENCE)

BEGIN INT DATA

***

* 

* 

RUN DTAS REDLST 48

* 

CONT? A

* 

REE

* 

*** IN DTAS DATA

(EBM UBEAVA DEFINED)

(MADE ILLEGAL MEMORY REFERENCE)

ERROR

PROP3 PROP2 PROP1 RT RS)
28 Sep 67  1600

Pot readings on hydraulic arm change radically when switches on arm control box are flipped to (or from) computer (or manual) control.

MEC

2250  28 Sep 67

1) Fixed (?) an addressing bug in 167 data from disk or camera, for cores 0, 1, 4, 2 were being misplaced. Fix was shaking BC 5 RIGHT MB connector in core 3 (!). If trouble recurs whole connector and 1665 should be examined.

2) Found that when disk was in test mode, TV camera wouldn't work. Trouble was 167 responding to microscope clock pulses. These pulses
(* BEGIN N DTA5 INT *)

***

CONT? Y

***

(* BEGIN N DTA5 RADI *)

(IPR ALREADY DEFINED)
(FPR ALREADY DEFINED)
(SIPR ALREADY DEFINED)

***

ATOM MADE ILLEGAL MEMORY REFERENCE (ERROR)

***

†C

* RUN DTA2 REDLST 56

†C

* REE

(* BEGIN N DTA5 INT *)

CONT? Y

***

(* BEGIN N DTA5 RADI *)

(IPR ALREADY DEFINED)
(FPR ALREADY DEFINED)
(SIPR ALREADY DEFINED)

***
BEGIN N DTA5 INT
*
*
*
CONT? Y
*
*
***
BEGIN N DTA5 RAD1
(IPR ALREADY DEFINED)
(FPR ALREADY DEFINED)
(SIPR ALREADY DEFINED)
*
*
*
***
BEGIN N DTA5 RADST
(PROP3 PROP2 PROP1 RT RS)
are sent when the disk is in test mode. Installed a gate at output pin 167 to prevent listening to fibrescope clock pulses unless 167 has disk selected. This was the morning's camera trouble.

3) Found that writing in cores 0-1 from 167 tends to get them hung up in a peculiar state. E This happens with either TV camera or disk. Not fixed. TV camera is just about unusable.

4) Fibrescope stopped sending clock pulses. Dutch fault fixed it. No significant delay to us resulted.

S.R. Russell
28 - Sep 67 23:36

TTYS hack when using EDIT2 to print out long lines of text, it types "\012\015LF. N. SPACE. T" instead of "\012\015LF. N. T".

28 - Sep 67 23:57

29 - Sept 67 02:45

Found "READ ERROR" on in disk. It was in "TEST" mode. Figures are as follows:

SAR = 6, 1
TRK = nothing
BAND = 6, 4, 1
DATA = 1, 4, 5, 6, 7, 12, 13, 15

Ran test mode with all 0's and all 1's for a couple of minutes, no trouble. Ran standard pattern as described in Service manual. I will leave this going.

John Lauter
1000 29 Sep 67
Ran EX MIRROR. Cores 6-1 were getting the same data.
Core was Pushed in and wiggled MEM BSS

plugs for P1 MA and control in cores 0,1,2
Ran EXPENSIVE MIRROR. It did not hang
or misplace data. Ran DSSTST
for 5 min on in and 5 min on out.
No parity errors, no hang memories, not bad.

IRR

1140 29 Sep 67
Put Disk in off-line test

IRR

1845 29 Sep 67
Rucker H/D Power supply blew its cool
5 min ago
I was just finishing working on Servo Amp's

AND I was running all joints manual @ 1200 PSI
when the Pump contacted dropped out. As water
the Accumulator then tried to Run Pump @ 1 AT
least three to four times its normal speed
(judging by PTH of metal parts flying)
I ran out and shut off power at box
As it slowed down it made (the pump)
Real Bad Dinging Sounds (Grating, Raspign, Etc.)
Checked timing on WRITE in 167

Write alternate 1'1 0'

DATA

10

Landscape clock

0087 20 Sep 67

Checked delay between SR -> BR 7T and
SR -> BR 51. It is exactly 100 ns

Run Time: there are no disk errors. No problems
with reading or writing, except one apparent
case of an invalid sector address being transmitted
operator. This condition was inadvertently cleared
before it could be investigated.

KRR

0087 30 Sep 67

Disk hang on invalid data record

Disk address reg: 377 765 4

Address sent was 0800 23777.

KRR
0300  30-SEP-67
Put Librascope disk in self-test
slow mode (for a change). No errors
in first five minutes.

John Santor

0340  30-SEP-67
Why does SPLIT SYNC light on
CPU come on when both CPU and DISK
are running even with disk off line?

J. Santor

0350  30-SEP-67
Running disk diagnostic. Test 1 (all
one bit) showed bit 21 dropping. Re-run
it. no errors.

Much trouble with core parity errors at
location 6777. This is the third location
of the write buffer.
Disk addressing failure. Data written starting at band 64+32+16+1, TRACK 1, segment 10+8+7 can sometimes be read on the same band and track on segment 9+8+7.

Much experiment has shown that writing on SEG = 9+8+7, BAND = 64+32+16+4+2+1 TRACK = 1 causes the data on band 64+32+16+1 TRACK 1 segment 10+8+7 to be copied onto segment 9+8+7, same band and track.

An attempt to make the same thing happen with a simpler program resulted in writing a couple of words of data from BAND = 64+32+16+2 TRK=0, SA = 11+8+2 onto the same place as above. The data that was written was not in core at the time of the writing but it was recognizably data written earlier by this phase of the disk tester. Frankly, I am confused at this point.
The problem appears not to be timing dependent; doing the last write from DDT still manifests the original bug. After getting the bug to happen I did the last two writes from DDT and managed to wipe out all of the above record. There are enough records involved that I had better number them. (A record, by the way, is 1280 words, or four sectors, long). The record that is getting wiped out is 2070008. It is getting wiped by us writing on record 216100. The data being put in it when the program is allowed to run without interruption, or with a read following every write, is the data that was written on record 2071008. When the last write before the write on 216100 is done with DDT, even if it is to the same record as is usual for the diagnostic (216073).
The record will be wiped out in a different way.

I tried disturbing the timing with breakpoints and the same thing happened. This suggests that the bug may be insensitive to timing but sensitive to a lot of history of writes. Putting a read after every write, as I did to find the write that was getting us, didn't effect it.

I tried changing completely the pattern of writes, putting every sixth record instead of every fifth. No change. The data from record 207100 is still being put in record 207000 when writing on record 216100, as stated in the middle of page 11.

I took the disk off-line and yanked it, then ran the test again. Same trouble. But record 207100 hadn't yet been written!

The data on record 207000 is being marked rather than overwritten by another record.
This is beginning to sound worse.
The following instances of transformation
were noted before I had to give up the
machine.

\[
\begin{align*}
207000 & \to 207100 \\
000000 & \to 000100 \\
777777 & \to 777137
\end{align*}
\]

Good luck finding this one! I put the clock in self-
test when I left at 9:00.

John Sauter

30-Sep-67
12:12

TTY 1 double trips

CPT has old STREET - STOP -
MANUAL PRINT seems to be lower case. Check p 163.

TTY 1 adjust and complete
preventive maintenance on all

Jess Douglas
0100 1-OCT-67

On write to the DISK, the third word of the buffer will occasionally have the second word OR'ed into it. Sometimes it is being given bad parity, to boot.

Test 12, random number generator, seems to leave parity errors in about half the disk. I have left the disk in that state.

John Sarto

0420 1-OCT-67

While running a new address tester the disk made a funny sound. It turned on the "sector address error" light, and, a few minutes later, "cabinet warning temperature" and "stator temperature". It also turned off "unit A operative" and "unit A". I tried to get 'hold of Dutch or Leo, waking up people and operators
from here to LA with no success.
In the absence of anything better to
do I will do nothing until somebody
shows up in the morning.

John Lauder

1725  1 Oct 67

Tested & Read errors that we
write on disk found the pattern
word1 11111 222222
word2 333333 444444
word3 555555 66666

all 0
other words: 0

Will consistently produce permanent read
errors.

L.Russell

1745  1 Oct 67

Note that check bits that
classescore writes are the number of
zero bits would be in each sector.

The self-tester is based on a 16-bit shift register that shifts once on 18-bit byte time. Thus it will always shift the pattern 4 times in each sector, and so the check character will always be its initial value. This is also true of almost all test patterns, such as counting, etc.

Writing the pattern:

word 1: 200000 00000
all others 0
gives permanent read errors on sector 3 of TEK 0

The pattern:

word 1: 577777 00000
all others 0
gives no read errors.

Dutch found 2 bad modules in check bit computation circuit, replaced them.
Now above patterns work. Tried also
They all seem to work. This may explain the mysterious "Timing" errors, but I don't think it does completely.

Dutch also set timing on clock to us on write to be 50ns earlier than it was previously.

H.Russell

1900 1 Oct

looked into cues some for word 2 or 3 and but didn't find any evidence wasn't a very thorough test, though.

L.R.

0040 2 Oct 67

Data missed and non ex mem. lights in 69 are out. Lamps are OK. Coni gives correct bits

L.R.
0125  2  Oct  67
Put disk in self test.

0220  2-Oct-67

Began running diagnostic. Disk is on line.

Bit 28 is being dropped sometimes.
It happened three times while address testing, then the address tester ran all the way through without error. The three times were: record 231267 word 14, record 231263 word 14, record 231665 word 20.

Random DATA found garbage on BAND = 128+4+2+1, TRK=0, but re-running found good data there but SAME garbage (651703) on BAND = 64+32+8+1, TRK=1. On re-running it happened on BAND = 64+32+16+8+2, TRK=1. While writing on this band (I didn't notice whether TRK=1 or 0) the SAR stopped
at 0 instead of 2277 as with all the previous tests. Also, only one sector is wiped out. Perhaps the disk is not stopping the write soon enough?

Trying to write the last or next-to-last words of core onto the disk gives non sense from IOP. It appears, however, that all the data gets transferred.

On backwards address testing, bit 21 began dropping at BAND = 16 + 8 + 2 + 1, TRK = 0.

With random data BIT 21 dropped at BAND = 128 + 8 + 4 + 2 + 1, TRACK = 1, SECTOR = 11 + 8 + 6 + 5 + 4 + 3 + 2, word 10. Likewise word 14. Likewise word 15. Likewise word 17. etc. The effect is repeatable. Happens with test #9 also. Also with test #1 (all 1 bits). Bit 21 of IOP SR flickers while writing.
1045 2-Oct-67

While running random data got
read error at band = 64+32+8
+4+1 TRK=1, DATA was OK.

First sector of band 64+32+4+2
TRK=0 contained data that had been
there before the last write to that place.
Likewise 64+16+1 TRK=0.
Read error at 64+4+2, TRK=1.
DATA OK.
Read error at 32+16+8+4+2 TRK=1.
DATA OK.
Read error at 16+4+2 TRK=1.
DATA OK.

John Santor
TRY 4 converts A into @
1 into φ
NEK

3-OCT-67 0010
Raw diagnostic bit 28 dropping,
3 picking up.

J. Sauter

3-03-67 0950
Put new ribbon in printer. TEST PRINT
caused ribbon to move but not in punch - everything
else OK.

Hugh

1400 3 Oct 67
169 is dropping Bit 21 in MA line

3-OCT-67
1557
III trouble continued will not
show rel - Y on abs which needs -
will use 0 (rel) or - diff (abs)
10/3/7  17:20

Suddenly totally mitched in input mode -- Sends perg. back to printer. It's lead to explain it is yourself.

-- CCS

10-3-67
TTY 7. Answer back off normal pressed here is key and it cleared.

TTY 4. Steve Russell tested it works OK.
TTY 4 operator working and works OK.

Return TTY 2 Ser # 39939 replaced all gears. Reason of gear noise.

Jes Gonzales

OCT 3  1967  2200

MA 22 lamp doesn't work. DATA MISS lamp on IOP doesn't work.

John Lauter

0015-9  Oct 67

167 hung up with DATA MISSED

CONG  10, 0
DATA  40, 0
DATAD 444, 0

DATA MISSED, SR EQ, BR RQ
MA = 42  WC = 600041
CHC = 0  SWC = 3

Conclusion: 1st part of 2nd sector didn't get stored.
PROG 51 did store in setup 92 and 42 but data was
0015 4 OCT 67 cont.

conclusion: Core I stored the 41 word correctly, but the 167 for some reason didn't meet BR RQ.

Tried new interter's diagnostic. It runs well.

0100 4 OCT 67

Dude got I read error on random number test. Data was OK. Error was recoverable. Ran again and it worked.

There only remain 3 intermittent that have not been fixed. They are:

1. First bit 26 is pecise bit 3 of word
2. The HA bit 21 error which wouldn't stay around to be found.
3. The cleaning up as first word of second sector. I started this one. I investigated other than to check that pulses were all there in normal area.

RR

12:45 4 OCT 67

CPU finds new code is all CMP OSSM.

Checked all LSS, boards for proper output.

Adjusted SKew PRINT delay

Looked at timing chain and it was okay and they will be okay.

4 Cleared it up.

Adjusted precipitation
04-Oct-67 1630

Machine stopped.

CPMA = 1207  PAR MA = 141204
CORE 3 not awaiting request
RDRQ + WRRQ + ~STOP + SYNC + P3 active
+ P3 last,

DP not running, IOP not running.
In CP: MCWR, SF3, SPLIT SYNC +
STOP SYNC + EXEC MODE + NON-EX MEM
+ MB ≠ n = 0.

On Box 3, MB = 0, MA = 1284, memory in
Run.

John Lauter

0030 5 Oct 67

ON lights on MAG TAPE ARE
burned out [RR]

0045 5 Oct 67

Ran random number disk test
found with great difficulty that MA bit
21 was dropped by core 0, 1 + 2. Worked over MEM Boss Table
2 between core 2 + core 3. Bug went away.
04-OCT-67 1640

Machine stopped, core 2 not awaiting request.
Same as before except all MB's = 0.
CPMA = 1062, PARMA = 101060.
Box 2 MA = 1060.

John Swartel

0045 6 Oct 67 cont

Run "address test" for dike found
bit 28 in core 3 marginal on write
found marginal signal from core 3
on MEM buses. 1665 in core 3 for
PH needs replacing.

KRR

0110 5 Oct 67 Chiller Water temp 56°

KRR

0415 5 Oct 67 Chilled Water temp 56°

Kandy
1000 5 Oct 67

Replaced battery in mike amp for spent product.

1045 A rapid scan showed that the following

SEM large (no complaints) and running and no trouble

DSK — self test no errors; called 560 and holding

LPT — needs another cleaning and lights

MTA — generally dirty; needs lights

40D oem — manual okay; needs room cleaned

DTA — seem to be okay with exception of DTA 3

MARGINALITY

CPA — MA 22 lamp doesn’t

FAS7 Mem — okay

corr φ — okay

1 —

2 —

3 — see specification note @ 0045 5 Oct 67

167 — DTA miss won’t light

Khuze Bay — okay

Comp — Room — shifty, will clean

will perform needed work on above after scan mode

finished

Randy
1100 5 Oct 67

Ripped she.

Found that P2 last on core 1
was not being set when DP was the
only processor running. Found T2
was weak. Replaced 1609 for T2
P2 last came on.

SRR

1100 5 Oct 67

MTA had bad fwd pinch roller bearing
Put new pinch roller in
Did not change any clearances on actuator
Should work but no way to check
As system was and is down for DSK checkout

1145 5 Oct 67

DP is still suffering from 2 bugs

1) All JMS to core 2 seems to colfer
the corresponding location in core 0.
Perhaps the instruction fetch from
Core 0 collters core 2 .
In any case the result is
the contents of the work in core 0 and
core 2 are getting "cled" together.

2) When the DP is running the
CP hangs. It is always waiting for
a RD RS from core 0.
It appears that this is due either to
another core sending an interrupt when core 3 is requested and core 3 responds
the DP is running or it core 3 sending
an interrupt ACK to the CP when the DP is running
and then forgets about the CP.

1230 5 Oct 67
Put disk on self test.
Chiller water 50°F

NrR

3:04 6 Oct 67
Disk just turned itself off.
Drive motor shut off but not electronics.
Sector address error was only error sight on.
Chiller thermometer said 86°F.

Thread of electronics.

P. Rd

1000 10/6/67
Line Printer the start stop bug is back with us. Hang up the whole program.
LPT Bug:

It seems that if you try to list with the printer and it was in an offline condition before you list and still is when you list, you can't get it to print by just hitting start. So say the losers claim that if you hit start → stor → man print many times in that order maybe it will suddenly start to print. However, I, with ZK + PIP2, can say "CZ with several lines full and printer offline and by hitting start — it will?"

Let's wait and see what develops

Randy

2015 6 Oct 67

Telescope disk shut itself off due to 90° water.

Rotating element was off

Sector sector address error was on. Cabinet warning and stater override came on. Shut electronics off.
0045 7 Oct 67

Contemplated memory problems.

Ran logic margins on core 3. Rock D got -3V. Bug that showed was not missing RD RS.

Tried running DP. Got after core 3 missing RD RS. Got muchoring of DP core 0 + core 2. In the hope of curing this tried checking and re-soldering the connectors on MB line 1 for PD + 12 in core 2.

Found 2 cold-soldered joints and 1 likely short between 2 lines.

Fixed all. Tried again.

No success. Bug core 0 + core 2 oring still there.

JRR.
0830 7-OCT-67

Found core 0 in maint, rest in run. Left it that way and ran Disk Diag. One recoverable read error in test 6 (lonely hole). No other errors. Ran diagnostic over. Picked up bit 3 in fourth word of buffer (core box 0). This box is still in maint. Got off at 10:00.

J. Lauer

7-Oct-67 20:11:50.52

Green Monster had indigestion again. I removed cover and looked at it (truly, it was cured.)

B. P.

7-Oct-67 24:20

Rev 5 Switch on preamp does not work
7-OCT-67  2225

Placed disk on line, started running diagnostic. 2330, disk got "sector address error" while no operation was being performed on it. Chiller was OK. Pushed Clear button on disk. Error light went away. Trouble with parity error in IOP. DWP diagnosed trouble with parity logic. Adjusted relevant B360. No further errors. Put disk in self-test about 0200 8-OCT-67

John Sauter

800  2 Oct 67 3

Was called at 1600 - machine didn't work.

Arrived at 1130. Got random errors from memory diagnostics.

TS MAIN correctly reported that FSC doesn't work the way it is used to.

Finally got checkboard to run in core 0 with de-interlaced memory.

Failed randomly. Failures correlated well with wiggly MB cable #1 from parity box to core 0.

Found connector for MB cable #1 in core 0 broken and marginal. Pulled #1 from core 0.
Fixed most of the marginal connections in core & cable #1. The connection is still pulling apart but it will only pull apart if pushed and pulled.

1405 8 Oct 67

Timesharing back up.

Running BLTST UIN54 & VIN56.

1430 8 Oct 67

All tests gave me no errors stopped above tests - no errors.

1550 8 Oct 67

Tried DP. Still hang CP in core 3 without RD RS sometimes and also has the JMS word clashing tendencies.

2040 8 Oct 67

MAS seems to be having trouble adapting to core minus DR. DR file generated by MR.
The printer blanks:

Notice characters don't line up!

6:30 9-Oct-67

Discovered that bit 29 was not getting to Core 2 or 3 from the CPU.
Found bad short in Core 2 with connector pin which had been soldered by a person who was meticulously careful not to get any solder on the wire, rounded pin.

[Sketch of DP indicating 'On' and Core 1 and Core 2 on a certain pitch.]

Looked carefully and discovered that at the end of a TMR5, the DP was issuing 'CR' before
MA was through incumnts. The result was that some MA bit were changing (at the Bus plug) as much as 50 n.s. after RQ went out (also at the plug). As a temp. fix and also test to see if this was cause of "o ring", I added 2 minutes in the path of the "end of JMS" (ETS) pulse for delay. The DP stopped "o ring" core 6 & 2.

P. R.

1150 9 Oct 67

Replaced lamp drive transistors for data mixed and NON 6X MEM on 167 lamps now light.

2255 9 Oct 67

Worked on core 3 hanging CP with DP running problem.
Tried replacing SA STRB LT-RT PA (P17) - Didn't help.
Replaced CP's 1664 in core 3 also found 2 cold soldered joints on connectors.
225-5 9 Oct 67

Did not fix problem.

SRR

2301 9 Oct 67

Librascope Read error.

sector 0

TRK = 1

Band = 1065

DR = 7, 5, 4, 3, 2, 18, 15, 13, 11, 10

Resetting twice did not fix

Gives same error except Band = 1058

Correction: Band is always 1058

Permanent Read error

called Leo Van Zante (Librascope)
at 2307.

SRR

2320 9 Oct 67

DP hangs with power on but does
nothing (maybe in 7515)

SRR

0010 10 Oct 67

Librascope back up. Down 1:03 SRR
0645 10-OCT-67
Mag tape drive does not work: tape has trouble moving. Perhaps pinch rollers too tight? Worked OK after a few minutes.

J. Sauter

0800 10-OCT-67
Disk shut itself off. Called Dutch. Shut of electronics. (sector address error, read error + write error were on). Chiller temp is 89°.

John Sauter

1030 10/10/67
TTY 1 machine guns

Rej
10/10/67 1400

Input runs on DTA5 went away when O changed drive

Pru6

10/10/67 2120

CORE 1 AND BIT 6 ARE

INCOMPATIBLE

2330 10 Oct 67

Replaced 2 transistors for BIT 6
→ ZOMB 001605 for P3 Left Data
in C1.

Ran BLT for 4 min

Ran OK

Put system back up

LRR

0100 11 Oct 67

More on OP - CP Relationship.

When core 3 fails to send RD RS to CP
the CP MB is in at least 3 cases zero

AW RG is not obviously changing on top
1000 in relation to P3 ACT in Core 3 going to zero. P2 - last P3 last looks correct.

No ideas. The DP also randomly covers 1 and 3 with a write request to stay location in system core. No WR R5 is sent. This bug goes away when the CP is not running. Porn is WM Wehrle's "Eywax.

LRR

0200 11 Oct 67

Tried replacing 0220 in 1E6 of Core 3. It didn't help the changing problem. At all 3 more cases CP MB always zero. FOO!

LRR

0930 11 Oct 67

Jesse has been called for TTY's

11:00 11 Oct 67

III's 453 scope overheated yesterday (no fan) seems to have blown.

11:45 11 Oct 67

Just got back from Tektronix. Took more losing probes to them.

453's fan costs 43.00 - NOW
1030 11 Oct. '67

10B 24 was continuously on. I suspect trouble in the cheap switch. However, trouble went away when I replaced wire from R3 D to R24 D.

B. P.

P.S. I expect switch is marginal to trouble will recur.

Oct 12 Switch was replaced Earl Farmer

11:45 Call James lesson about our Pre Amp.

Will send prints on cabling & schematic

Randy

More on Pre Amp

Used all my stock of lamps for pre amp.

Keeps burning them up

Maybe wrong lamp? will find out.

Also the channel rev. sci. is okay but there is indications of maybe a broken wire but need seem to trace

Randy
2055 11 Oct 69

Core 1 not a RQ. P3 ACT RESTART
MA = 0 DP not running

LRR

2130 11 Oct 69

TTY 4 doesn't send to system correctly. Works on local. Works equally poorly on 12 inputs.

LRR

0800 10-12-67

Q1 is not working. Trouble appears to be in digitizer - video input is at present connected to X-disc output.

L00

(1200) 11000 10-12-67

Jesse will be here on 10-13-67 in evening.

10-12-67

TTY P double trips ✓

DP WM

1605 12 Oct 67

Great experimentation with missing pulse detection showed that the CP bug in core 3 bug was due to P3 getting a core cycle started and sometime between T2 and P1 SA STAB P3 ACT turning on. The RD RS
aimed at P3 (the CP) went to the DP (P2). Replacing the 622D in 1D14 seems to have made the bug disappear. Perhaps there was noise setting P2 ACT when CHC last PROX was set at T2? Perhaps the noise problem has been swept under the rug.

Probably margins should be run on P3, core 3, ID to see if perhaps the bug is still nearby.

JLR

2000/12-12-1967 Adjusted A plate TTY #16
TTY #4 Cleared commutator, TTY #1 I can't understand the log but was told it was double tripping. Checked spring tension and adjusted hybrid reset lower spring tension.

Jesse Tomagals

TTY #7 is dropping characters and loses TAB in output mode.

PSV

0800 14 Oct 69
Core 2 Hung NOT A W RP
P3 Clear.
CP RD, NON EX MEM, IF IA DP was Dummy
14-OCT-67
15:50

Found that B. Miller changed T/15 but not restore. C. Petit started to fix it but could not find wire map but so just left it with wire hanging. I put in duplicate wire. One mysteries wire still hanging but sent work anyway. E. cord that picked up bit (2) was bad. W-102 (all styles) still one from own interface buffer while now.

M.E.W.

14-OCT-67 2240

630 died. TTY's cannot send move to system. Happened to all TTY's at once very suddenly, CTY is OK.

John Sauter

2030 16 Oct 67

Display #2 has no motor deflecter unplugged it.

Display #1 light pen keeps falling off light pipe.

Display #5 should not be runs say III

APR
23/15  16 Oct 67

CORE φ Hung
CP MA = 277.04  NOT AWRQ
RD RQ  WR RQ  SYNC  P3 ACT  P3 LAST
CP: NON EX MEM
SF3  MC WR  SPLIT  SYNC  STOP  SYNC

ARAR

0315  17-Oct-67
Put disk on-line for the first time in several days. Initial trouble with dropping bits 12 + 30, but worked OK after a couple of re-starts. Let cook until 0900. No further problems. Put disk in self test at 0900, using standard pattern.

John Sautee

17-Oct  1408
FAST MEM  NOT AN RQ  WR RQ LOC 1

1550  17 Oct 67
Display #2 had unplugged cable. Plugged it in. Works now - light point on Diag 2 does not set display.
10-17-67 1830

QI Digital output now ok, fifth flip-flop in shift reg not turning off exchanged if for the first.
Y DAC output now at +100 will look at it tomorrow.

10-18-67 0200

Put Disk on line and ran 1st of diagnostic. No trouble. Modified random number generator. Still works.
Memory trouble. Box 1 dropped bit 7 a couple of times (turning an AOBJN into a BLT, with disastrous results. IOP got parity error once, MA ended in 7. PAR ERE STOP switch was on. Bit 3 was dropped during address testing at one point. All above effects went away upon re-running program.

10-18-67 0930

QI now works. Lord Y Pulse was unable to jump small open circuit in cable.
10-18-67 12:00
TTY 2 double trips

10-18-67 1:30
CRT appears to have pins connected to station in large
quantities on occasion

TTY 7
Type = in place of =
sometimes (luckily) Time

TTY 0 does not work properly

R. Parsons

18 OCT-67
18:52: 46:08

18-DEC-67
21:20

R. PARSONS WRITES POOR NOTES IN THE HARDWARE LOG

19-DEC-67 0550
Disk placed on-line for 75
diagnostic

J. Sauter
19 Oct. 9:30
Set with overflow on MOVEM command (coax bits were 3113)

19 Oct. 10:45
DTA1 is too loose

17 Oct 1543
Read even call Dutch

SER
\[\text{3 3 5}\]
TRA 2
DATA BAND
173
260
131

1600 19 Oct 67
ITY 0 Double 
and then use the keyboard when it sends
the space bar occasionally.
19 oct. 67

TTY 1 DOUBLE TRIGGERS!!

D. Poole

19 oct 67

Disc read error
sector 348

TRK = 18
Bank = 173
Date Reg = Bits 8, 6, 43, 15, 14, 13, 12, 11

Recoverable

TTY 1 Broken contact (keypad) block
TTY 2 operator striking keys too hard adjusted H plate
TTY 3 adjusted blocking levers
TTY 1 adjusted clutch trip lever shift and alignment B H plate

Jesse Gonzales
2340 19 Oct 67

Disk Read error - recoverable

BAND = 1738
TRK = 1
Sector = 7618
Data bit on = 9, 8, 5, 3, 1, 17, 16, 15, 11, 10

20 Oct 67.
TTY1 is U/S.

3:05 20 Oct 67

DP x deflection does funny thing
(glitches)

Case 2 not AVRQ

SYNC P3 Act P3 LAST ADR 4350
DMA 104350 RM MA 4352

1815 21 Oct 67

Summary of disk errors to day:

Recoverable read errors at 0540, 0600
0720, 0805, 0915. Disk down for
maint. work performed intermittently for
short periods starting at 0700
and finishing with a card replacement by
Lebarsscopie at 0945

At 1435 got a non-recoverable error while running US disk diagnostic attempts to repeat got error to repeat got 2 adjacent words elobled and we got a parity error in the second one.

Various combinations of 2 dropped words and parity errors secured.

0 pole wired in ce more pessimistic timing error detector.

This error detector so far has detected 2 errors, and data missed was turned on, indicating its honesty.

Essentially all of the time since 1935 was spent by Stanford personnel investigating the nature of the errors.

It seems, from circumstantial evidence, that the Stanford part of the interface is intermittently causing timing errors on writer maybe?

See next page for disk drive output and DDT output from this period.

SRR

18:20 CP hung
Missing RD RS from core 3
169 was running before hung got DATA MISSED to message.
PASS COMPLETE
DATA ERROR
GX+C

.11?
.DDT

1$H/ (0)TRK+13
2$H/ (772223)11752
TRK 13$H/ (34160)703400
11752$H/ (106204)653353
CORADR/ (772223)31746
DSKADR/ 575740
CONDSK/ 1000
CONIOP/ R1+20 =4010

REC1.XXX
RECXXX

BUF1/ TRK+21
BUF2/ 11746
BUFDES/ CONO 720, @TRK+21 (3) $H; (772223)TRK+21

DDO$B

TRK 21/ (42434)430173
11746/ (42434)430173
TRK/ 70710
2045  21 Oct 67

Machine hung.

FEA MC RD  MA = 1147

167 Inactive  all MENS AN EQ

LRR

2130  21 Oct 67

Disk ERROR (probably 167)

167 DATA MISSED, LOSSAGE

OUTPUT (to DISK)

WC = 772225  MA = 24175

Nothing else.

Re ran operation with no problem.

LRR

2200  21 Oct 67

167 Error as above

DATA MISSED  OUTPUT LOSSAGE

WC = 772226  MA = 024176

Disk: Band 13/8  TRK = 28  SA = 04708

Worked OK on retry.

LRR
22:10  21 Oct 67

Printer turned itself off (STOP) while printing. Push off START OK.

22:20  21 Oct 67

Manually operating DATA 6 makes TRANSMISSION ERRORS on DATA 0.

LRR

22:30  21 Oct 67

167 ERROR
IN WC WR DATA MISSED LOSSAGE

WC = 774220  MA = 033744

Worked OK on retry
LRR

22:45  21 Oct 67

Parity ERROR at SC 24175

OPNO = 270343527303

Orig data  
Data was in disk buffer

Data read was = 2701023103
Data crunched on output?

LOSSAGE was on but not data missed.

...that was only error in that operation.

New error similar to LOSSAGE not reset.

Error was on read.

Parity error was in write buffer.

* Word written in write buffer after writing 11704/317777 476573 (parity error)

word read 03522/675329 676553

word before 12460/362555 452171

?? still apparently write crumching data

Retried read -

got LOSSAGE data missed mc wr

WC = 772264 MA = 32010

Disk band = 44; TRK = 0; SA = 13718

Did not retry

[Signature]
2308 21 Oct 69

LOSSAGE on 167 turned on randomly.
No error detected by TS DIAG.  

2312 21 Oct
167:
MC WR DATA MISSED LOSSAGE
MC: 77 2407 MA: 32133

DISK BAND = 62, TRK = 0
SA = 563

Walked OR or retry

2332 21 Oct 69

167: LOSSAGE on no other errors.

2350 21 Oct 69

169: LOSSAGE no other errors

0120 22 Oct 69

One 3 not AWRQ
RD RQ WR RQ SYNC PB ACT P3 LAST
CMA = 14144
CD: NON EX MEM 1F1A  SEC
22

0150 21 Oct 67

Moved setting of AFO Split sync in CP from AT2 to ATP to correct a probable race condition between setting split sync and beginning of SF6. This should prevent the hang up of core 070. They were probably due to a split cycle request being sent to the core and then the CP deciding to do a separate cycles and not sending WR RS.

0420 22-Oct-67

Passag light set in IOP during write. Did operation over. Went OK.

J. Hunter

10-22-67

Returned hybrid for T#1, cleaned and adjusted hybrid contacts T#4.

Jessee Gonzales
0330 23-Oct-67
Put disk on line for TS diagnostic.

J. Sauter

0900 23-Oct-67
Disk back off line - self test

J. Sauter

12:00 10/23/67
TTY 4 drops low order bit 0118-00

20:00 10/23/67
TTY 7 is doing a TRT on output
(that is, a 1-1 mapping of intended characters out
other) DEL

0130 24 Oct 67
Emptied clutch-dust catcher on LPT.
It was 2/3 full.

D.W. P.

The following TTY's are out of order 0141 6/7

M. H. Haackel
17:30  24 Oct 67
TTY 7 is garbling an output.

D prints as F T prints as 1
TTY 9 keyboard converts A into @ and OK.

drops character.

TTY 6 Keyboard converts carriage return into wev sometime, A into @

Some time on remote.

Trouble is not TTY 6 is OK.

Receiver in 630 for line 6.

TTY 0 prints does not run in OK.

either local or remote.

LRR

1300  24 Oct 67
Started on line disk test LRR

1325  Pass Complete  LRR

1330  Disk error - data late.
Retried
Retried again - worked  LRR

1353  Pass Complete  LRR

1405  Trouble with TTY 6 is really
      in the TTY Keyboard after all. Better
      check line 4 and 6 on the 630 gate trouble LRR
1408 24 Oct 67
2 Passes Complete
Data late on Read  ARR
Reran ok

1415 Got data late, on write
Reran ok got confused
Ran continued
Got data late, data missed on read  ARR
Continued  ARR

1421 Data late Write

1450 Data late Write

1505 Data late Read Data Missed  ARR

1720 2A Oct 67
LPT Has been cleaned (Drum To)
Hammers have been adjusted Light, Dark, Up, Down
New Ribbon

Reported Ty's 0,4,6,7

J. Gayles
0739 25-OCT-67
Take-up reel on DTA 5 squeak.

J. Sauter

1230 25-OCT-67
Fixed DTA 5 squeak with tape. Had a tape give ens which went away
much

Rip

0036 26 Oct 67
TTY 4 header was giving @ for A most of the time. Cleaned keyboard contacts. No help.

TTY 6 Double Trips occasionally.

LKR
CORE PARITY ERROR, LOCATION 000000106333 OPND = 244000026127
PC = 75000106334 INSTR = 200114777767
DATE = 000637351134 TIME = 0111:26

occurred while running 34K LISP.

9:45 26 Oct 67
Replaced bad paper feeder belt on LPT
And removed bad fan from logic bay
From same animal

Randu

P.S. will try to fix fan or find new one

Now have bay cable support stock in
For Petit's memory

Randu

17:45 26 Oct 67
Fixed fan, will put back!
They all have been cleaned and oiled
LPT + 130 display Randu
1747 Also have checked the last two op amps for Hybric. They will work alright but a pot was robbed off of each will replace them.

Randy

0530 28-Oct-67

Mag tape controller sick. Attempting to select MTA0 selects MTA4 instead.

J. Sauter

0550 28-Oct-67

Mag tape came back mysteriously.

J. Sauter

0600 30 27 Oct 67

All fans in LPT are operational.

Randy

1030 27 Oct 67

Give MTA back to R Ready

Run Diagnostic – no bug.

Randy
Oct 27, 1969 - 9:30

DPA2 seems to stay in WRITE LOCK when you switch it to WRITE enable

TTY1 is typing double characters (in particular A).

27-Oct-67 12:45

LPT paper pulled. Lost BELT.
I took it APART and found METAL RINGS
in Bearings. Don't know where from but
CLEANED + relubed + new belt fixed it.

P.S. New belt is rubber. Randy

Oct 27-67 12:00

TTY 3 has lost all screws holding it
to the base. It held together only by gravity.

Oct 27-67 15:00

TTY will not fall on your feet now

Oct 27-67 13:00

DEC replaced dectape heads on drives
3 and 4. We tested them and they seem OK.
Heads were taken by DEC to
investigate again then down. DEC also

1800 27 Oct 69

DEC replaced dectape heads on drives
3 and 4. We tested them and they seem
OK. Heads were taken by DEC to
investigate again then down. DEC also
recommends the tape guides be cleaned more frequently to keep the accumulation of oxide from building up on the guides.

DEC also tracked down some of the "D140 makes rotary transmission error on D148" to pitted contacts on the control relay. Some were replaced, but there are not enough spare relays to replace all of the D140 control relays. They probably should be replaced. It is rumored, but nowhere written by DEC, that the relays should be replaced once a year.

[Signature]
CORE PARITY ERROR, LOCATION 000000017201 OPND = 777755020006
PC = 044000017135 INSTR = 200040017216
DATE = 000637362741 TIME = 1528:34

> CORE PARITY ERROR, LOCATION 000000000201 OPND = 311100001212
PC = 044000017135 INSTR = 200040017216
DATE = 000637362741 TIME = 1528:49

CORE PARITY ERROR, LOCATION 000000005201 OPND = 064252152202
PC = 044000017135 INSTR = 200040017216
DATE = 000637362741 TIME = 1529:05

CORE PARITY ERROR, LOCATION 000000007201 OPND = 246040023410
PC = 044000017135 INSTR = 200040017216
DATE = 000637362742 TIME = 1529:20

CORE PARITY ERROR, LOCATION 000000010401 OPND = 254000010456
PC = 044000017135 INSTR = 200040017216
DATE = 000637362742 TIME = 1529:36

CORE PARITY ERROR, LOCATION 000000016601 OPND = 542100001263
PC = 044000017135 INSTR = 200040017216
DATE = 000637362742 TIME = 1529:52

SYSTEM REINITIALIZED AT 1534:00, 28-OCT-67
28 Oct 67

P 6 EDITR input error, with a tape (apparently wide) on DTA1. Worked fine afterwards on DTA 4.

C 6/6

TT 44 is giving non-printing characters in place of typed characters at random intervals.

C 6/6

TT 46 is not always giving carriage returns, also gives wrong characters randomly.

CALORIMETRIC REDUCER OPERATES ERRATICALLY.

GRADIENT CONTROL INOPERATIVE. ATTEMPT

AT REPAIR BY D. POOLE

29 Oct 67

Core 1 dropping lift half on X select 154 (solid). Replaced taken in 1K8. Fixed.

D. POOLE
BALUN BOARD PINS;

1440  29 Oct 67
TTRY  drops bit mostly low order

505  29 Oct 67

with balun board

Trouble was eyepot on balun board.

It was incessantly cold soldered. Visual

inspections is OK, but under microscope

it turns out that there is a hair-line

crack under the eyepot. Ohmeters test

show conductivity in center of eyepot

but not on outside. See me for

the board.

ARR

225  24 Oct 67
Ditto 4 Coat!
2140  29 Oct 67

Fixed wavering X position on type 30 wire from -10 Ref Supply to X docs was broken and intermittently high resistance.

SEP & FMP

Scope still seems to waver in and out of focus some times.

SEP

2140  29 Oct 67

PART FELL OUT OF LPT!

RPG

30 Oct 67

O 240
Parts (bits) falling out of core 3. It prefers to send zero to CPU, rather than the FHQ instructions we put there.

30 Oct 67
0700 - 0730

Dump can't load the system.
0730, J. Artes
0145 30 Oct 67

LPT has new FABRIC BLET
in paper puller

Randy

1245 30 Oct 67

Arrived at 8:16
E.
Traced bug to MA hit 22 being dropped
by core 3.

Removed 1665 for C3 MA and
resoldered all the bus wire to rear
connectors. Replaced 1665 and
ran BLET for about 20 min. No errors

System back up at 11:35

SER

2215 30 Oct 67

TTY1 double triggering
again

D. Poole

0100 31 Oct 67

SRR is a CROCK!! Core 3 MA 22
dropping bug came back, found shortened XISTOR

on 1669. FIXED.

D. W. L. R. P.²
0940 31 Oct 67

Call Jesus Gonzalez, will be here
well or there etc.

LRR

2100 31 Oct 67

EMPTIED PRINTER CLUTCH BOX

2/3 FULL, LAST EMPTIED ON 23 OCT

LRR

Also adjusted long stop delay

on DTA 4.

PRINTER SHOULD BE UN-DUSTED

EVERY 2 WEEKS.

LRR

2135 31 Oct 67

EXPERIMENTS INDICATE THAT SOAKING STATIC
DELTAPES IN WATER DOES NOT IMPROVE THEIR
performance! (IT MAY MAKE THEM WIDER)

LRR

13:15 1 Nov 67

Relative Humidity is 30% in computer room

with Humitrol's off

Randy
15415  I Nov 67

Hemtrolle on? for 2 hrs

RH at dectapes = 30% RH at Green

monitor intake = 32.9%

1945 OK

1745 1 Nov 67

Power went off momentarily (1/2 sec)
accompanied by other physical & psychic
phenomena (buzzing sounds, jumping floors
etc.), disk motors still running, but
electronics box went off. Called librarian,
power went off in 4th, but came back on
restored at 1:40

DCS Ld, MNH.

2012 1 Nov 67

RH at dectapes = 20% RH at Green

monitor intake = 30%

2125 1 Nov

Turned 'humidists' or green monitors
off. Turned green monitors to fan.
Left up evaporative cooler from storeroom
to high with 8 x 48 fl oz of H2O
11/1/7 2250

DTA4 STILL COASTS

2335 1 Nov 67

DTA4 is correctly adjusted for middle of DCS's Tape. Tape is no slipping (?)

Temp at Console = 85°  RH = 25%

Turned Green Monsters to cool.

Room thermostat was at 72°

1700 2 Nov 67

RH = 85% at DeCapter

1320 2 Nov 67

RH = 45% at DeCapter

1335 2 Nov 67

Run T5 VIN54 & VIN55 for 2 hr

no errors
Nov 2-67
Ty 4 broken spring
Ty 1 replaced distributor brush
Ty 7 cleaned distributor and replaced brush
Ty 6 adjusted front supporter code bar

20:30 2 Nov 67
RH = 32%

2:210 2 Nov 67
RH = 32.9%

22:20 2 Nov 67
shoulder 9 elbow pots or scorpion need to be replaced
Bill Pitts

23:20 2 Nov 67
17H = 30%

4:110 3 Nov 67
RH = 26%

I was mistaken. Pots are OK
B. P.
TTY 1 is jumpy; duplicate characters.

11/3/67 10:30 am

TTY 7 misses CR from program intermittently. Rod.

11/00

1303 3-nov-67

RH = 38%

0130 4-nov-67

RH = 36%  Temp = 80°

0825 4-nov-67

RH = 42%  Temp = 80°

3:30 5-nov-67

TTY has gone into music mode.

Chs. 5:30 5-nov

TTY 1 is jumpy and types double characters.

136 has something wrong — error message channel device AD and impossible to create an image on the scope.

When you read the AD scope running on you kill the display or you get hung device AD.
10:20  6 Nov 67
Type
9:30  Someone burned up thermal strippers!!
10:30  7 Nov 67
System has been taken down and auto BIT loaded
Steve took sys down because of a mem bug....
Core 3 seems to give parity errors from time to time

PROGNOSIS:

BIT run for 13 min no errors
Now the old system is in on running
(System 167, disc)

Randy

Randy

We have our own tool boxes
Tools little by little
The ones

Is that if you people
Sending allen wrenches,
live cords - test equip, etc.

Is there will not be

to you replaced them
TTY 1 is jump y - duplicate characters 11/3/67 GCS 10:30 am

TTY 7 misses CR from program intermittently 11:00

1303 3 Nov 67
RH = 38% 20

0130 4 Nov 67
RH = 36% Temp = 80° F

0825 4 Nov 67
RH = 42% Temp = 80°

S 1/C

 DD T
S/ INIT 15,17

 DD T
S/ INIT 15,17
S+1/ 0 $"/AD/
S+2/ 0
S+3/ 0 JRST -3
S+4/ 0 INPUT 15, S 15
S+5/ 0 CLOSE 15,0
S+6/ 0 JRST DDT
S 15/ 0 (777000) S 27
S+16/ 0 4250
S+17/ 0 110010
S+20/ 0
S+21/ 0
SSG — Read OK Display dies
SSG +C — Ring device AD
10:20 6 Nov 67

Type

9:30 Someone Burned Up Thermal Strippers !!

10:30 7 Nov 67

System Has Been Torn Down And Auto Bit Load

Steve Took Sys Down Because of a Mem Bug. ---
Core 3 Seems To Give Parity Errors From Time
To Time

PROGNOSIS

Bit Run For 13 Min No Errors

Now The Old System Is In On Running

(Swapping System 167, Disc)

Needs Work

10:30 7 Nov 67

Now That We Four Have Our Own Tool Boxes

I'm Sorting Out The Tools Little By Little

And Taking The Better Ones

The End Result Is That If You People

Can't Keep From Bending Allen Wrenches,

Burning Up Telephones—Line Cords—Test Equip, Etc.

And Tool Misuse In General

You Deserve To Die As There Will Not Be

Any More Tools Issued To You

If You Break Them, You Replaced Them
REPAIR

WHEN WILL YOU

BE BACK?

Nov 7-1960
16:30

OK so if I can't
find a tool I will simply
break into your
toolbox.

P Law
Nov 7 67 1930

Replaced reset lever (Ty 1) keyboard & hope this clears
Ty 7 wrong spring & K lever
Ty 6 not line feeding at times, upstep bracket out of adjustment 94

240 8 Nov 67

Run Auto BLT on bare machine, for
3 hrs 56 min. No errors

Found bit 34 being dropped from core 2-3 when hanging on 1665 connectors in core 2
found connector not melting. Connector needs replacement
for complete fix. But re-adjusting 1665 connectors
temporarily fixed problem. If necessary to
re-lamping both 1665 in core 2 then be very careful that LH (as you face toward
Mem base connector from back) connector is seated and firmly pressed.

LRR

03.35 8 Nov 67

Started running BLT against disk test program that reads random 1000 word blocks
from back 0 of disk and pens over
the words read in to try for a parity error
used zt.

0446 8 Nov 67 Above combo still
running - seems that there are no
errors, there is something more complicated
than running the disk or the system involved
in 3015 getting D parity error

LRR
3 Nov 67

CORE PARITY ERROR, LOCATION 000000021605  OPND = 206240002000
PC = 750000021606  INSTR = 263740000000
DATE = 000637443551  TIME = 2136:27

115  3 Nov 67
Running 3.15  Parity error
Loc 5123  Date 762105  013125

Disk was last user of core 3.

LRR

120  3 Nov 67
Running 3.15  Parity error
Loc 627  PFB  Date 204400  022523

Core 3 had disk last

Disk transfer was in progress = SPLIT
SYNC was on.

LRR

Same as above.

CORE PARITY ERROR, LOCATION 00000060723  OPND = 204400022723
PC = 340000006274  INSTR = 251042000000
DATE = 000637445145  TIME = 0133:25
9 Nov 67
DTA 4 gave Transmission Error msg - no problem with DTA 1 & same tape. 

81

11 Nov 67 0338
One instance of static in dactype -
Old type, but may sometime
Could n't find humidity. Got

90

Nov 14 2200
Lansing Speaker on top of
Skully has bad rim suspension.
Speaker should not be used until repaired.

Bill Pitts
Nov 15, 1967

930. Called JBL in L.A. about

Lancet 77 speakers

IT WILL COST $36.00 PER UNIT TO FIX
AND WILL TAKE ABOUT 15 DAYS TO REPAIR

PS. Their sending me repair order forms + shipping

New Core

CORE PARITY ERROR, LOCATION 000000274037 OPND = 77577777777
PC = 340000004564 INSTR = 254520001067
DATE = 000637501043 TIME = 0031:15

CORE PARITY ERROR, LOCATION 000000274037 OPND = 77577777777
PC = 340000004564 INSTR = 254520001067
DATE = 000637501043 TIME = 0031:36

CORE PARITY ERROR, LOCATION 000000223603 OPND = 000400043604
PC = 750000165605 INSTR = 306040777777
DATE = 000637502122 TIME = 0914:42

CORE PARITY ERROR, LOCATION 000000222113 OPND = 000400042110
PC = 750000165605 INSTR = 306040777777
DATE = 000637502123 TIME = 0915:12

CORE PARITY ERROR, LOCATION 000000221345 OPND = 000400041350
PC = 750000165605 INSTR = 306040777777
DATE = 000637502123 TIME = 0915:40

A

DA

16-Nov-67
Nov 16

1. D to A converter is inaudible
2. The Ampex tape deck can't record because the head is crooked.
3. The speakers need fixing

Nov 17
17:00

Scope still has line over somewhere
Selected using r scope

2320 16 Nov 67

Replaced 1664 with broken connector
for P2 in core 3 DP now works.

RQ 1NH is not shown on any DP prints
Intensity is still not set correctly for
30 cpc. rep rate.

2345 17 Nov 67

Changing final expoint of display on
console 0 causes display to shift.
Characters that seem dead
causes 0 at core size 2 + looks like *
Underbar runs down. Circular kids runs up.
K.c. It is too narrow parentheses and
curly bracket are indistinguishable.
lower case \( f \) is too narrow
\( \downarrow \) and \( \uparrow \) look alike
\( \Rightarrow \) are indistinguishable

lower case \( \times \) is like \( \times \)
\( \Rightarrow \) are indistinguishable

lower case \( \sqrt{\cdot} \) is too high
\( \Rightarrow \) slants like this: \( \Rightarrow \)

\( \alpha \) looks like \( \times \)

\( \& \) looks like \( \& \)

\( \pi \) looks like \( \pi \)

asterisk looks very bad.

"double quote is too small" lift and right quote aren't big enough.

\( \circ \) looks like \( \circ \)

\( \# \) looks like \( \# \)

\( \% \) looks like \( \% \)

upper case \( I \) upper seriff is too small

arrowheads aren't noticeable.
Upper case H runs down hill

+ is drawn +

? is drawn ? no dot no pronounced curve

& is too narrow

≠ looks like + etc

≡ is drawn ≡

Artignan is not set right.

Vectors and characters have small but constant trembling.

Long vectors don't have good end point match. They end too soon.

Fun program shows very strange effects in 1st and 2nd quadrants (new bug)

Small boxed with dot prob.

Bit 17 is not core but dropped by DP in cores 0 +1

Date from New to DP for bit 17 is a little weaker than other from cores 0+1 than from other cores. FB does not cut in these cases.

LRR
0230 17 Nov 67

Rebootted connections on 1605 for
1 1/2 of PB on core 1. DP bit
came back. Fan now looks
a bit better - symetric at least.

0320 17 Nov 67

DP slight pen flag comes on randomly
with all shutters closed. Consoles 0, 4, & 5 are
on.
Console D size of display changes
with DP intensity setting.

0325 17 Nov 67

Emptied printer dust cup. 1/3 full.

0345 17 Nov 67

Setting a cone to the DP
that sets NOT RUNNING MASK continues
results in an immediate
interrupt and no continuation.
1930  18 Nov 67

Disk  Slowdown  ERROR

$AND = 121$

TRK = 2

SA = 2200  (invalid addr)

Data = 1, 3, 5, 8, 9, 10, 11, 14, 17

2 Hit Clear - restarted OK.

18 Nov 67  16:20

apparantly random signals from joystick

2000  18 Nov 67

Bit 10 of I/O bus stuck on

Replaced R123 in P crack ca19

Bit 10 went off

DP Russell

2000  11 Nov 67

DP was dropping bit 17 from

core 0 to 1 7 again.  Reconnected core

1031 with 48 in data connection from

core 1 to core 2.

DP Russell
0340 11-21-67

Got both core parity error and disk read error at the same time while testing new system. PAR MA = 103022, MB = 466271356236
Disk: SAR = 10+9+8+7+6+4+3+2+1
TRK = 2, BAND = 5+4

J. Lauter

0345 11-21-67

I'm trying to track down a checksum error problem I put in a re-read feature into the system disk routines. I have evidence that, in writing, occasionally a half word of data is not sent, the previous half word being sent in its place. The first case was the right half of word 1 being copied into the left half of word two. Now we are getting
the left half of word 3 getting copied into the right half of word 3.
The word following (word 4) is stored with incorrect parity.

Again. This time word 2 (left half) was written for many further half-words and some of the original data waslobbered. (I know because it has bad parity). The original data started in box zero.

Again. This time the only error was that the original data was llobbered. Much as I hate to destroy several hours worth of work, I am going to have to run slick diagnostic. Diagnostic showed nothing. Loaded system. No trouble for the few minutes left me before Raubs got on at OSDD

J. Lauter
930 21 Nov.

Consistent input error on DTAS went away when I changed drive.

Karl

11/21/67

24K CORE LEFT 12.00
24
R F4 24
*DTA3:M/Z=DTA5:MAIN
? IS AN ILL CHAR
T

Pierre

1910 21 Nov 67

LPT DIES IF ALL HAMMERS PRINT AT ONCE. TRY

R CAL
X 1968

21 27 21 Nov 67

TTY 4 threw its belt
Tighten belt tension and replaced belt.
Saw selector clutch lever not engaging.
Cleaned clutch end oiled selector arm sets and cleaned oil off clutch.
Works better.

SRR
2150 21 Nov 67

Found that the printer bug of 1910 could be fixed by slight bending of NO PAPER lamp. Problem is really that the lamp is getting old and dim. It should be replaced.

RR

1300 22 Nov 67

Display #3 had spot in center of screen, minimum intensity would not make it go away.

I shut it off.

Randy

2230 22 Nov 67

Bit 24 stuck on in core 3.

[Handwritten note: if bits 22, 29, or in MA, I had just hit that area with some flailing cables. Replaced 1998 in 2K11 of core 3. Bug went away.]

RR
23 Nov 67
19:40

321 has developed trouble seem to bulit random. Can't seem to find anything more.

OBO

23 Nov 67
18:50

Come to look more it almost disappears when I put a scope on it.

OBO

19:45

Bug back comes and goes when
with B connectors in Core 3 sound alright.

FUCK!!
1730 26 Nov 67

-3
-2

Reports received of persistent parity errors at random locations in core 20 at 1000.

When we at 1750 found bits sticking in parity MA. Found a somewhat melted wire for +10 to be stuck in IC. Replaced it at great effort. Had to remove entire parity box to do it. It appears that a clipped lead could have caused the parity error generator to short the +10 to ground or -15.

Machine still doesn't work

Ran FAST mem tests
MA tests
checkboard, or interleaved memory
Instruction tests P1 & P2 work

Discovered that P3 complained about
the console teletype not coming clearly.
BLT stops, runs for a while and
then dies with interblurred AC's.
Relocation test P1 & P2 steps mysteriously.

L.P.O.

2045 24 Nov 67

TELEPHONE ON CONSOLE HAS OPEN "A" LEAD.
0230 26 Nov 67

Replaced 4814 at 636 A21

Part 3 of instruction test complain about the existence of ESC

Unplugged new memory brass cables. ran part 4 of instruction test. No problems. Ran BLT for 31 min. No problems.

Reloaded system. Started TS BLT. UINS 4 + UINS 5. System hung up. with PI' in progress on ch 3 and ch 4. Wouldn't restart. 16K DECDUMP won't load.

LPR

0730 25 Nov 67

Replaced a 1608 with low margin in fact men. 1575. Replaced 166-1 in fact mem. Fact mem now has margin about as shipped.

Run fast men tests for about 10 min. OK.

Run BLT for 31 min. Started system running the time sharing diagnostics. They all ran OK for 10 min.

LPR
1946  25  NOV 67

MUL  DIV  BLST  UINS4  +  UINS5  all now
successfully for 1 hr. in the system.

The machine seems to work as well as ever.

JRR

P5.  First reported down at 10:40 PM.

Up at 11:45  Sat.  Time to fix 3 = 33 hrs. 45 min.

JRR

Q515  26-NOV-67

Under new system (3.15) the console  
TTY P1 registers apparently dropped a bit -
came up with P1 1 instead of 5, killing
the system.  Restart at 14:00 restored P1 to 5.
I wasn't using the console TTY at the time.

J. Suter
Humidity ~ 18%. HELP!

6:30 Monday morning 27 Nov. 67

Fixed lack of termination of FMC SEC
in new memory. Memory is now looked
to new memory. Run BLT for 5 min. The
machine is working.

11-27-67 10 AM - 12 AM

Ran Fast Memory Test
Auto BLT
High End Address Test

Ran Margin on Fast Memory 10V ± 2
15V ± 3

" " Core φ 10V ± 5
" " 2K in CPU

Only one error detected
(see next page) No diagnostic...
2315  28-NOV-67
3.15/02 (swagger) died in a
re-read check, poked with DDT and
determined that the left half of word
1418 (second word of third sector) was
being spread into many following half words
(not possible to tell whether head or write
was doing this). After 10. This was quite
noted when repeated at intervals of a few seconds.
After I stopped and poked a few minutes with
DDT to determine the above information, the beep
went away.

J. Stauter

1730  29 Nov-67
Type 30 Scope was not permanently in
character mode in TECO. Recheck
TECO seemed to make it go away.
Found 1102's in 136 loading -10 on 1 to
Type 30 in 3 bits (15, 16 and 26)
replaced 4102's. -3 now supplied.
29-NOV-67  1845

System died several times under mysterious circumstances (re-loading from tape didn't help). TS MAIN died immediately after loading, when re-loaded ran fine. AC TEST ran OK. System re-loaded and died. Re-loaded again and ran. Whatever the trouble is, it seems to be intermittent.

John Sauter

29-NOV-67  1920

When running null job we jumped from 7 to 2007. Also, bit 25 of the PC came on once when the system was printing the "initialized" message. MI bit 11 doesn't work again.

J. Sauter
29-NOV-67 1940

TS MAIN started "punch test"
the paper tape punch to start for no obvious reason. It is sitting in a loop just above location 2000. It seems reasonable to believe that bit 25 came on in the PC.

J. Sauer

2100 29 Nov 67

Take machine for evening maint

Run SYSTEM with TS main BLT, VIN54, VIN55 -
checked +10V MARGINS on CP 2D, 2E
2H, 2J, 2K all were +7.5V High & Low

Run TS MAIN and checked -15 margins

<table>
<thead>
<tr>
<th>RACE</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>2D</td>
<td>3</td>
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</tr>
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<td>2H</td>
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<td>5</td>
</tr>
<tr>
<td>2I</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2K</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

saw no real errors.

I cannot explain J Sauter's bugs

Machine back up at 2345 - Down 3 hrs 45 min.
MT 8th in flight by touching lamp.
Dec. 1 1964

Richard Skip dias P. J. V.

1245 30 Nov 67

System kept dying with non-ex mem

Tried machine for Emergency maintenance

Blt stopped at 183 claiming 000's were

string wrong effective address.

Bit 35 of PPA is out. Ccannel was confused

M1 Bit 11 is out.

Reason Blt wouldn't run was failure

to put machine in PDP-6 MODE

Run Blt came more. Occasionally it

hung up. Bit 25 in the PC was observed

to be on.

Tried swapping 6206 for MA & PC bit

25 with 6206 for Bit 18. Got men up men's

with a little waiting. Bit 18 of PC was on.

Replaced the 6206 in bit 15 formerly

bit 25

System up at 1800. Down for 5hrs 15 min

Violent pounding on the N end.

Of the 6205's for the right 1/3 rd

causes the machine to stop with

many 1's in MA and a non-ex mem.

DRR
2020 30 Nov 67

Men's cable number 2 to DP has broken connector in core 3. It is in a working state now, but not likely to remain so.

2137 30 Nov 67

0.5 Light in Men's Room is not.

2200 30 Nov 67

Disk permanent read error

Band: 13710 Tek 0 sect 0-3

Was OK 28 Nov 67.

Also Band 2810 Tek 0 sect 9, 7, 5, 3, 1 temp

2810 Tek 0

28 Tek 0

28 02

10610 Tek 0

2250 10 time
<table>
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<th>TRK</th>
<th>Sect</th>
<th>Octal</th>
<th>Times</th>
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<td>23</td>
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<td>39</td>
<td>&gt;30 perm</td>
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<table>
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<table>
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<td></td>
<td>416</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>permanent</td>
</tr>
</tbody>
</table>

Room temperature was 74° when written, in 69° now, according to Honeywell Thermostat thermometers:

Reset Thermostat to try to get 74°

Lost time = 1 hr 20 min
<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
<th>&quot;E&quot;</th>
<th>ADDRES</th>
<th>COR. WORD</th>
<th>ERR. WORD</th>
<th>C(BLTC)</th>
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<td>004401</td>
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<td>761252041250</td>
<td>057777023130</td>
</tr>
</tbody>
</table>

0053  1 Dec 67

Got 2 all men refs for BLST

\[\text{VER}\]

0045 1 DEC 67

When we got tired of writing down read errors (previous page) we put the disk in self-test. No read errors. At 0045 we set the self-tester to read only. We will leave it this way for a few hours to see if it will get any errors. We have no thermometer in the disk cabinet, but the Honeywell thermometer reads 71°.

J. Sauter
DTA3 ASSIGNED
JOB 1
STANFORD 2.8/09A
0915 1 Dec 67

RUN DTA3 BLTST 10

ADDRESS ERROR...MOVEM FOLLOWED BY CAME FAILED.
C(CAC)    C(EAC)
765253011251 765251011251

ADDRESS ERROR...MOVEM FOLLOWED BY CAME FAILED.
C(CAC)    C(EAC)
765172011170 765170011170

ADDRESS ERROR...MOVEM FOLLOWED BY CAME FAILED.
C(CAC)    C(EAC)
765253011251 765251011251

ADDRESS ERROR...MOVEM FOLLOWED BY CAME FAILED.
C(CAC)    C(EAC)
757153003151 757151003151 +C

.D DTA3
.COOT\NT

ADDRESS ERROR...MOVEM FOLLOWED BY CAME FAILED.
C(CAC)    C(EAC)
765173011171 765171011171 ?

ERROR IN JOB 1
ILL MEM REF AT USER 253
+C

.DELLO, THIS IS GEORGIA. WILL SOMEONE PLEASE MOUNT TAPE 382 ON
DTA5, WRITE ENABLE?
1030 1 Dec 67

Disk errors

RD ERROR
SLOW DOWN

Band 2007
TKE 0 S/A = 1.2648

DATA 1, 2, 4, 10, 11, 12, 17, 18

Removable
Continuing on Disk read only testing

11:20 1 Dec 67

Disk error

RD ERROR

Band 1718
TKE 54 S/A 7168

DATA 1, 2, 7, 8, 10, 12, 15, 16, 17

Honeywell approx 72° (approx 20 time)

1200 1 Dec 67

Quite many read errors on

Disk. Called Librascope. Talked with

George Plato. He suggested that

other Fan on the absolute filter on top

of the rotating element be left off if
when the deck is not open, to give better temperature control. Turned off fan, put in slow read/write self test.

Replaced 1562 -10 V reference supply in Type 30 scope B14. The wavy lines seemed to be due to hum getting out of the -10 V supply to position due to. It was intermittent and disappeared before the replacement, so it is not certain the 1562 was the cause.

There remains a bag in the Type 30 that causes defocusing of the spot at various places. It does not seem synchronous with the display rep rate which is synchronous with the line.

APR.
1430  1 Dec 67

Disk Error

SA = 15428  BR = 2148  TR = 0

DATA  3,5,7, 10, 11, 12, 13, 18

Recoverable

1800  1 DEC '67

Read error on disk

BAND = 128 + 8 + 4  TRK = 0  SAR = 15428

DATA = 124,417

Recoverable

J. Sauter

1950  1 DEC-67

Disk taken out of self-test.

J. Sauter
Dec. #1, 1967 22:30

J. Sander reported a hardware bug. ADD occasionally didn't get the right answer. After S. Russell insisted on waiting 15 minutes, we replaced the 6245 in 21H23 (bit 3,4). Problem went away.

P. C.

0025 2 Dec 67
TTY3 printed F for + once.
TTY2 printed same to send garbage to computer. Line interface not checked.

0303 2 Dec 67
TTY 0 sends computer M for 0 & for C when odd Line interface not checked.
12-2-67 Completed PM on all model 53

TTY2 replaced distributor brush spring
TTY3 replaced distributor brushes
TTY6 checked out OK
TTY1 replaced platen

Jesse Ponzak

2-DEC-67 1600

Power lost for about 1 sec. CP stopped; restarting at 14D end, we were OK. Disk electronics shut off, motors OK. Electronics came back on with no trouble, put disk off line and read everywhere, no parity errors.

J. Lauter

1967 Dec 4
EXP. TEP PRINTER DUST CUP. 3/4 FULL 1/4

4 Dec 67

RETURN & E Buttons OK in TTY3 DON'T COME BACK UP.

11-Dec 67 TTY3 OK

1715 4 Dec 69 Power off for about 5 sec. Disk motor power not lost.

No obvious problems

FRR
12-6-67

DBL has been looked at and
switch fixed & REV noW works
installed new 1820 lamps
adjusted gain in both preamp Channels
they were way off --

Randy & Ted

CORE PARITY ERROR, LOCATION 00000050527 OPND = 260400002166
PC = 3500000022166 INSTR = 307040006021
DATE = 000637641171 TIME = 0152:21

CORE PARITY ERROR, LOCATION 00000050527 OPND = 260400002166
PC = 3500000022166 INSTR = 307040006021
DATE = 000637641206 TIME = 0200:54

12-8-67 0230

FOR BIT PICKING BUG:

167 picking up bits 3, 4, 5 occasionally.

Trouble traced to noise on 16-bit shift
Data wires (1 side). Twisted 3, 4, no
bug. Will have others twisted
12-8-67

MARGIN LOSSAGE!!

~3 V. DROP IN -15V, MARGIN CABLE AT 167 (2A LOAD). LOSE.

D. W. P.

12-8-67 14:20

are 3 min connect 6 DSP word gain to get it to stop dropping bits.

D. W. P.

12-20 8 Dec 67

5 min down to turn off 167 for wiring and re-run memory cables for accuracy.

D. W. P.

Dec 9

Mag Tape

ON- BULL
READY- BULL
REMOTE BULL

are always OFF

(Diagnostic: change the bulb)

P.J.V.
9 DEC 67 14:18
POWER FAILURES FOR A FEW SECONDS

9 Dec 67

2:35 notice that backspace file on MT4 sometimes stops too soon (Ref ex 50?) not repeatable

11 DEC 67

12:15 summary of weekend III tests

16-DEC-67 power failure 1:22am

11-DEC-67

12:15 summary of weekend III tests

using editor as primary means - hard to grasp almost never demonstrated same

O.R.W.
11 Dec - 67
1:00

Control Key on TTY3 jammed on.

11-DEC-67 1600

Disk read error while off line.
Band = 133, TRK = 2, SAR = 1647
Recoverable.

J. Sauter

11-DEC-67 1700

Disk Read error while off line
Band = 133, TRK = 2, SAR = 1503
Recoverable

J. Sauter

11-DEC-67 2200

DISK RD. ERROR AGAIN (RD. ONLY SELF-TEST).
Band 285, TRK 2, SEC. 1537.
Recoverable.

P. M. P.
1745 12 Dec 67

Disk Read Error - Recoverable

Band = 205  TRK = 2  SA = 1503

LRR

1920 12 Dec 67

Disk Read Error - Recoverable

Band = 205  TRK = 2  SA = 1503

LRR

2200 12 Dec 67

Emergency Start at 20:30

Parity errors found while running disk diagnostic

In 1 case bit is got dropped after being

written by CPU but before getting to

167

In another case a 000 turned into a

000 in a loop in the disk diagnostic

Any string for a 000 Trap to occur, said loop

was not run while disk was in transfer. Both were

Run BLT interlaced and de-interlaced

No problems. Tried to run core 1 sense

amplifier margins. Found no margins to

which the operation of BLT was sensitive.

I suspect that we have never run any

meaningful sense amp margins in core.

Turned off new core controls.

Ran disk diagnostic some more

got past places where errors occurred

previously.
115

0812  All power failed (about 2"")

0840  13/Dec

TTY I has trouble spacing
properly after c/r, it overprints
characters

Worked on but not repaired

13-DEC-67  Earl

0930  OSK electronics powered up & in Read only self
Test to see if above power failure hurt it

955 System stopped. DWP's temporary memory
protection light was on. The system would
not re-start after this was reset. It was
re-loaded using the hand waver program. The
system went back in to operation at 10:15.
During the above time (after the system
stopped), we disconnected the (original) Ampex
memory bus cables and terminated the
memory bus in CORE 3.

J. Gleason

1330  13 Dec 67

Core 0 nor AW RQ

P3 ACT P3 LAST (nothing else)

Running)

No inhibit etc

CP mon. ex. MEM on next cycle

JRR
1335 13 Dec 67

SYSTEM WRITE PROTECT LIGHT CAME ON. SYSTEM STOPPED. RESET LIGHT. STOP, CONTINUE, SYSTEM FLEW.

S.R.R.

1410 13 Dec 67

DP kept getting zero data.

Repaired MB cable #2 (MA + RO + WRRQ) which had a broken connector on Core 3 and of C 3 to DP cable. Replaced 1665 for cable #2 in Core 3. Odd one had broken connector.

DP still was dropping low-order bits.

Wiggled FR in RT 1/2 data.

Wiggled & Connectors from Core 3 to DP for cable #4. Troubles disappeared.

S.R.R.

1745 13 Dec 67

Door latch panel on CP Fry. 1 is loose.

S.R.R.

1800 13 Dec 67; Installed 4 new memory bus cables between CORE 3 and the Ampex CORE Interface.
0345 14-DEC-67
Read error while running on-line.
BAND = 175  TRK = 0
SAP = 2773.

Module band. Sorry.
J.S.

14-DEC-67
Line printer col. 35 prints poorly. New ribbon doesn't help.

14 DEC-67
I move the smudge column to the 115th.
But was unable to repair because of not having the necessary parts.
1335 13 Dec 67

SYSTEM WRITE PROTECT LIGHT CAME ON. SYSTEM STOPPED. RESET
LIGHT, STOP, CONTINUE, SYSTEM FLEW.

LRR

1410 13 Dec 67

DP kept getting zero data.

Reported MB cable #2 (MA+RO+WR+) which had a broken connector on Core 3
and C3 to DP cable. Replaced 1665 for cable #2 in core 3. Old one had broken connector.

JP still was dropping low order bits. Wiggled on RT 1/2 data.
Wiggled connectors from Core 3 to DP for cable #4. Trouble disappeared.

LRR

1745 13 Dec 67

Door latch panel on CP door is loose.

LRR

1800 13 Dec 67: Installed 4 new memory bus cables between Core 3 and the Ampex CORE interface.
345  14-DEC-67
Read error while running on line.
Band = 175  Trk = 0
SAR = 2773.

non ex band. sorry.
J.S.

6000  14-DEC-67
line printer col. 35 prints poorly. New
ribbon doesn't help.

14 DEC 67
I move the smudge column to the 115th
but was unable to repair because of
not having the necessary parts.

EARL FARMER

115 COLUMN
LOSE
15 Dec. 1967

TTY 3 occasionally receives line feeds from computer when not expected or desired. The occur both when typing and not typing

Page

12/15/67

Retaining spring on DTA C is too tight

Go

12/15/67

TTY 3 gives periodic line feeds.

12-15-67

TTY 3 trouble due to typing C R too fast while computer typing back C R LF and.

Try 1 dash out of adjustment. Not aligned properly.

Jess Gonzales
15-DEC-67 1620

Console teletype turned from PIA-5 to PIA=1 under 2.8/09 A.

J. Sauter

16 DEC 67

PIPZ didn't like DTA5. It found "DATA ERRORS" which disappeared when I switched to DTA4. I was doing a "K".

Have interchanged the interface cables for TTY 1 and TTY 3 (Cables 01 and 07 resp.) to try to track down the TTY 3 "occasional line-feed" problem.

J. Gleason

2205 17 Dec 67

Power off for 2 sec, on 1 sec off 2 sec. Then on. Disk electronics off.

Note: Stayed on. Storm rages without.

JRR

Last power failure 13 Dec was also in high wind.

JRR
0115  18 Dec 67

Traced the problem with bit 9 pecking up in Lapey memory to poor noise margin on interface bay 3. Running +10 V up 1.60 makes problems go away.

   LPR

0148  18 Dec 67

Parity error at 115027 Ready
Data = 004000 011502
Disk should not have been touching that part of core.

   LPR

0242  18 Dec 67

Parity error at 533
Data = 777777 000000 should have been 777777 000000
FCA
Disk was transferring to Disk
from # 160002 and below
Disk was operating normally (?) (no error lights)
Split Sync was on.

   LPR

0255  Parity error at 533
Data = 777777 000000 should have been 777777 000000
Disk was transferring out to Disk
ended at 160002 split Sync error
Same as last error.

0345  same as above.

Disk gets data missed on next try
when this happens.

0348

Disk got data late. DATA MISSED to core.
MA = 224177 WC = 777641 BRRQ SRRQ

0420  16 Dec 67

Parity Error at 533 after above.

0425  Parity error at 537

Data = 767757 000 000 Should have been 777777 000 000

Disk Out  MA = 164002  JB DN  F14 = C

SPLIT SYNC.

0428  Parity error at 13723

Data = 700600 000 000

Disk Out  MA = 164002  JB DN

mostly BSDF
0435 Same as 0428

0505 18 Dec 67
Tore machine for emerg. maint for 30 min.
Replaced 1665- in core 3 18C12 (LH data)
Found one in last one in stock had
a bit 0 that wouldn't x out.

Part board with broken connector into
core 3 18C12. Ran BLTST for
10 min, 5 min swapped No errors.

LPR

0540 18 Dec 67
Parity error at 533 same as 0247
Bit 14 dropped

0506 fit didn't fit

LPR

0546 18 Dec 67
Parity error at 533 same as 0247
Except $67 MA = 164000
I/O = ?

LPR

0653 18 Dec 67
More of similar bugs
Disk had been running got mystery in
system at 13723 720600 500000
changed to 700400 000000
dots 4 & 10 dropped.

LPR
0601  18 Dec 67    permanent

Parity error at 033 537
Data = 777777 000000 should be 777777 000000

Split Sync

167 TO core, JB DN
MA = 164 000  WC = 0

KRR

0610 Parity error 533    permanent
Data = 777777 000 should be 777777 000000

Split Sync

167 TO Disk, JB DN MA = 164 000 WC = 0

0620 another one.

0633 another one at 137 23  see 0558
not that split sync was not on, but
Disk was requesting PE

0643 Parity error at 115 27
Data = 244 000 011 5 02
Should have 254 000 011 6 02
Disk  JB DN TO DISK MA = 2000 2

etc.

KRR
0659  14 Dec 67

Run BL7ST on Z-8 and

Disk diagnostic set to WRITE on disk

Got parity error at 13233

data = 77220312833
77233312333 dropped bit
   11, 13, 14

Split Sync

167 JB DN to Disk  MA: 143 002

Many parity errors, with disk both
reading and writing.  The parity errors
seem to depend only on 167 activity.
Perhaps poor margins in core 3, a duty cycle
sensitive problem, or mostly likely
a problem associated with localeials.

Why always random bits in the LH word?

ARR

0745  18 Dec 67

TTY 1 Carriage return Bounces

Reprinted
19 Dec 67
1945 18 Dec 67

Found that new margin cable to core 1 shorts out when it is plugged in and Plenum door is closed.

Down for 10 min

RR
19 Dec 67 - TTY 1 still bounces on
return.

2322 19 Dec 67 #

-15 V margins do not appear at core 3
unless old margin cable is parity
box is reconnected. Old margin
cable should not be left lying
in the bag where it can short out.

0930 20 Dec 67

TTY 4 threw its drive belt again.

0915 21 Dec 67

Jumper for margin voltages installed
in bay 3 of CP Power shut down and then
up. System had to be reloaded.

Ted Panofsky
930 21 Dec 67
Bit 28 in core 2 light is out

10:00 21 Dec 67 Repaired
Earl Farmer

1105 21-DEC-67
Disk turned on "sector address error".
Running off line, reading.  BAND = 7010,
TRK=Φ, SAR = 1508. Recoverable.

J. Lauter

12/21/67
DTAL Tape Slips

12-22-67
Repaired TTY 4. Bad motor rubber shock
inserted more smoothly.
TTY 3 brush hair under hybrid contact #3
TTY 1 dished pot office adjustment out

Jesse Gonzalez
CORE PARITY ERROR, LOCATION 00000032327 OPND = 24160000002
PC = 35000032330 INSTR = 25004000002
DATE = 000637733645 TIME = 2233:07

CORE PARITY ERROR, LOCATION 00000032327 OPND = 24160000002
PC = 35000032330 INSTR = 25004000002
DATE = 000637733657 TIME = 2243:14

CORE PARITY ERROR, LOCATION 00000032327 OPND = 24160000002
PC = 35000032330 INSTR = 25004000002
DATE = 000637733672 TIME = 2253:15

REPRODUCIBLE Parity error.
Same program each time - apparently same place!

24-DEC-67 1700
DTA1 and Edit2 combined forces and screwed me, completely.

Fix DTA1!
There is some distinct incompatibility between PIP & EDIT 2. This is about the 4th time and different occasion I have had this know.

I couldn't locate software log;

There is a distinct incompatibility between EDIT 2 & PIP. The following is a typical example.

(Just only F, near E. Ie there are no 'DIR' files).

This is about the 6th occasion I have met this trouble.

<table>
<thead>
<tr>
<th>EXPRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0010</td>
</tr>
<tr>
<td>0020</td>
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<td>0180</td>
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<tr>
<td>0190</td>
</tr>
<tr>
<td>0200</td>
</tr>
</tbody>
</table>

FUNCTION | AHECHO |
MADE PDP 6 BETTER AGAIN:

`EBP A, FOO` LOADS RESULT INTO ACCUMULATOR `A` IF A ≠ 0 (JUST LIKE SKIP AND MOVS).

SAVED 1 SECTION OF 6123 (1F14 MHz)

WHICH USED TO CAUSE MB ← AR AT CHT7 (CHT7 INC OR)

DESCRIPTION OF MOD:

`IR CAO` CAUSES SAC ENH ON SAC = 0 (STORE CYCLE)

CHT7 NO LONGER CAUSES MB ← AR AFTER POINTER INCREMENTING; INSTEAD, CHT8 (WHICH OCCURS ONLY AFTER INCREMENTING) CAUSES MB ← AR(J) (SEE MB CONTROL)

THE STORE CYCLE IS THEN ENTERED AT ST3

INSTEAD OF ST7, WHICH GETS THE AR STORED IN THE AC IF A NON-ZERO AC IS SPECIFIED; OTHERWISE SAC ENH IS TRUE AND ST3 GOES IMMEDIATELY TO ST7.

WITH THIS INVENTION, I'LL SAVE AN INSTRUCTION!

D.W.R.

0130 26 DEC. 67

0156 26 DEC.

RAN 75 MAIN/PARTS 1, 2, 4 FOR 10 MIN.

BARE PART 5 FOR 10 MIN. KIND BIG.
1730 26 Dec '67

READ ERR ON DISC (OFFLINE). ERROR OCCURRED AT UNKNOWN TIME.

BAND 2/3 SEC. 154 TRK. 0

RECOVERABLE.

D.M.P.
Folks, try this simple test:

R PIP 4
*DTA6:X<DTA3:R0
*+C
.R EDIT2
*S6,X
*X
+C
(IN DESPERATION AT SEEING PRINTED RESULTS) +U

see my comment earlier
(SETSET
   GENERAL FUNCTIONS)

(define ((
  (reset (lambda (nil) (prog nil
  (map speclis (function (lambda (j) (mks (car j)) (get (car j))
  (quote init))))
  (map setlist (function (lambda (j) (mks (car j)) nil))))
  (map klis (function (lambda (j) (mks (car j))
  (list (list (get (car j)) (quote op)))))
  (return star)

  (define ((
    (abs (lambda (n) (cond ((minusp n) (minus n)) (t n)))))
  (assocx (lambda (u v) (cond ((null v) nil)
    ((equal u (car v)) (cdar v)) (t (assoc: x: y: 
    x u (cdr v))))))
  (atsoc (lambda (a v) (cond ((null v) nil)
    (t (atsoc a (cdr v))))))
  (atomlis (lambda (u v) (and (atom (car u)) (atomlis (cdr u))))))
  (carx (lambda (u) (cond ((null (cdr u)) (car u))
    (t (error (list (quote carx) u)))))
  (delete (lambda (x y) (cond ((null y) nil)
    (t (cons (car y) (delete x (cdr y))))))
  (flatten (lambda (u) (cond ((null u) nil)
    (atom u) (list u)
    (t (flatten (cdr u))))
  (nconc (lambda (flatten (u) (nconc (flatten (cdr u))))))
  (fnl (lambda (nil nil) (iden (lambda (u) u))
  (mapcar (lambda (x pi) (cond ((null x) nil)
    (t (cons (pi (car x)) (mapcar (cdr x) pi))))))
  (mexpr (lambda (u v) (cond ((null v) nil)
    (atom v) (eq u v))
  (xn (lambda (u v) (cond
    ((null u) nil)
    (member (car u) v) (cons (car u) (xn (cdr u) (delete (car u) v))))
  (t (xn (cdr u) v))))
  (ncons (lambda (u v) (cond ((null u) v) (t (cons u v))))
  (rassoc (lambda (u v) (cond
    (null v) nil)
    (equal u (cdr v)) (car v))
  (t (rassoc (cdr v))))
  (remake (lambda (u) (maplist u (function car))))
  (remexpr (lambda (u v) (map u (function (lambda (j) (pro2
    (remprop (car j) (quote expr)) (remprop (car j) (quote fexpr))
  (return star)

  (define ((
    (minusp n) (error (list (quote remove) x n))))
  (null x) nil)
11:30 12-27-67
Read Error Band = 139
TRK=0, SAR=6. Off line
read only, inhibit read compass.
Recoverable.

J. [Signature]

1430 27 Dec.

Disc read error
B 170, S 1635, T 0
off line, read only.
Recoverable.
D. [Signature]

2130 27 Dec

Core parity error - Reset worked.
Now system seems happy.

2200 27 December 67
Disc read err again (sometime between 1900 and 2200).
B 213, S 154, T 0.
Recoverable.
D. M. [Signature]
0915  12-28-67

Had Disk Read Error at unknown time.
Recoverable.  

J. Gleason

0930

Replaced the rubber O-Ring and spring on the left spindle of DTA1. It now seems to operate without slipping.

J. Gleason

CORE PARITY ERROR, LOCATION 000000213646  OPND = 0004000000200
PC = 350000231700  INSTR = 275100000003
DATE = 000637757705  TIME = 2300:04

CORE PARITY ERROR, LOCATION 000000214022  OPND = 0004000000200
PC = 350000231700  INSTR = 275100000003
DATE = 000637757705  TIME = 2300:27

CORE PARITY ERROR, LOCATION 000000213650  OPND = 0004000000200
PC = 350000231700

1200

AWRQ light was off on CORE φ. Could not clear it except by turning CORE6 Power off then on. CORE1 also had its AWRQ light off. It reset by pushing "Restart".
After resetting the CORE φ and CORE1 AWRQ lights and the Disk Read Error, the machine was initialized using the "Hand Waver" (tried 16K DEC Dump first). For some reason the NULL job is running very slowly (~1 sec).  

J. Gleason
1945 28 Dec 67

In chasing the elusive "parity error in core 3" only when disk is running "bug" discovered that when the "+10B margin" on core 3 core #1/4 V low it causes parity errors for the 165 at 40500 etc, other such. - In core P? ??

SRR

2000 28 Dec 67

System back to users. There "disk error in another part of core 3" (hereafter referred to as the DCPE1APOCR3) bug isn't independent of the +10B margin on core 3 and of the balun board in "K5 in core three." This balun board could have had open resistors to cause the good paralel bug to reappear. (Maybe). When the clock service routine has a lot of skip 533's in it, it reduces the probability of 533 getting clobbered. Without those instructions the probability of 533 getting clobbered is much higher.

SRR

Order # Mem Refs by CP is all the core 132 P 123 P3 the last core P

in the skip 1 and the last 3 is the parity error

SRR
2020 28 Dec 67

Bit 16 Lamp in PARITY MEM BUFFER is out.

LRR

2000 28 Dec 67

Bit 16 in PMB fixed itself.

We tried replacing the 533 in core 0 with an XEC [533] where the 533 was normally in core 0 and core 1. It seemed as if the occurrence of DCPEIAPOOC1 bug was less if the location of the 533 was core 1, but the statistics were not conclusive.

LRR

2120 28 Dec 67

Inserted thermometer in DISK air cooling system - cleaned it first.

Temp = 90°

LRR

2205 28 Dec 67

Cleaned MAC TAPE. Ran NAGISF for 10 min, no errors (of course).

LRR

0907 29 Dec 67

Disk read error Band 2138, Tile 0, Sector 228, Recoverable

LRR
1000 29 Dec 67

Strege clepleand in CP for Syagement Runct
1F x M - 2L8k
Parity Box A12 - GND for disable

10:50
Disk Read Error: S.A. = 15 27, T.R. = 2
B.R. = 205
General Clear worked alright. J Pleason

50 - Russ Cables

CP 1 2 3 4 4 3 2 1
in 4 M 8 15
551 F 123 4 4 3 2 1
551 D 9 16 1 2 3 4 4 3 2 1

696 C 8 16 1 2 3 4 4 3 2 1
516 F 1 8 1 2 3 4 4 8 2 1

630+N 1 8 1 2 3 4 4 3 2 1

12:40 12-27-67
Disk Read Error: S.A. = 15 54x, T.R. = 0
B.R. = 213x D.R. = ∅

16:50 12-27-67
Disk Read Error: S.A. = 20 24x, T.R. = 2
B.R. = 20x D.R. = ∅

17:13 12-27-67
Disk Read Error: S.A. = 25x, T.R. = 0
B.R. = 20 2 D.R. = ∅
1800  Dec 29, 1967  Disk Read Error
S.A. 52 03, T.R. = 0, B.R. = 202, D.R. = 0
Cleared.

1900  27 Dec 67  Disk Read error
Band 2078  Tr. = 2, Sa. = 40
Recoverable

20A. attempts
20. 3 power for data Set.

1300  30 Dec 67
Read error  Recoverable
Band 202  Trk. = SA: 34

1330  30 Dec 67
Read error  Recoverable
Band 213  Trk. 0  SA 56

1345  30 Dec 67
Read error  Recoverable
Band 202  Trk. 0  SA 113
Dec. 30, 1967
16 50 Unit A "Slow Down" alarm light was on. Pushed General Clear and it went off. Then a unit A "Read Error" occurred; S.A. 212A, T.R. = 0, B.R. = 152, D.R. = 0. Pushed General Clear and immediately got another Read Error; S.A. = 0050, T.R. = 0, B.R. = 202. Had to push General Clear 3 times to Clear the Read ERROR. After ~3 sec. a read error occurred again; S.A. = 2042, T.R. = 2, B.R. = 205, D.R. = 0. Pushed Clear again and it cycle for ~5 sec and stopped; S.A. = 0052, T.R. = 0, B.R. = 202, D.R. = 0. Have called D. Poole to look at it. J. Gleason

1720 12/30/67
READ ERRORS:

<table>
<thead>
<tr>
<th>BAND</th>
<th>TKH</th>
<th>SECT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>+52-172</td>
<td>0</td>
<td>2123</td>
</tr>
<tr>
<td>+52-172</td>
<td>0</td>
<td>2226</td>
</tr>
<tr>
<td>+52-172</td>
<td>0</td>
<td>2234</td>
</tr>
<tr>
<td>202</td>
<td>6</td>
<td>1640</td>
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<tr>
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<td>6</td>
<td>1746</td>
</tr>
<tr>
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<td>6</td>
<td>2003</td>
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<tr>
<td>+52-172</td>
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<td>1722</td>
</tr>
<tr>
<td>202</td>
<td>0</td>
<td>1624</td>
</tr>
<tr>
<td>+52-172</td>
<td>0</td>
<td>2135</td>
</tr>
</tbody>
</table>

START AT % BEFORE EACH OF THESE. RANDOM, NON-REPEATABLE.

THE TEMP CHANGE BUG ??

(SAYS 71°)
More on above: Error on \text{\ttfamily 75-\%} \# 2123 is repeatable but not solid; i.e., on 'sector repeat' it takes \text{\ttfamily 1 - 1 sec} for error to occur.

D. W. P.

1530 \text{\ttfamily 21 DEC 67}

PCRock on 20A circuit \# 34

| CPA | 20A | CIR \# 4
|-----|-----|-----
| CP  | 20A | CIR \# 6

FAST MFB

163-0 30A  1
163-1  1  13
163-2  1  15
163-3  1  17

TYPE 30 20A  25

AMPX INT 30A  32

III DP  20A  36

167 30A  7
680 30A  9
F-0 CIR 30A  5
645 30A  11
Klugace 30A  2

\underline{20\%} 1/1 - 68

'MC RQ' indicator on day 1 of 166 doesn't work; light is good, so must be driven.

D. W. P.
0645  32 Jan 69

When Running Inclusion test, p/5

Remember to:

1. Deposit JFCL (255 000) en locaton 3071
2. Turn off paper tape reader
3. Turn off H 706 flags in 650 for any lines that are "running open"

HP

0330  2 Jan 67

Bug still not fixed

1. FIB I-O bus power signals run short
2. Do Po. Shot out 8 bits of I-O bus
3. Dectapea behave erratically if at all
4. D.P. PI's seems confused (won't reset)

HP

This is probably your confusion.
Remember 8 bit OFF means set PI.
0900 2 Jan
Disc Read Error
S.D. 1535
Band 11
TR 0
OK 9
Will Not Clear

1245 2 Jan 67
MAN TAPE DOESN'T WORK
MASTER won't move the tape at all
even after the system was restarted at
1130. The initial rewind doesn't move
the tape either.
Will investigate later
LPR

1100 2 Jan 67
Disc is showing numerous solid errors
on band 11 especially. I suggest leaving
the disc alone until tomorrow noon when
the room temperature has stabilized again
LPR

1820 2 Jan 67
Removed random pegtails from 8500 DP 3B31
LPR
0300 3 Jan 68

Chased disk problems since about 9:20.

Disk doesn't work. Gets parity errors on write usually, but also sometimes runs away happily, clopping core. WC stands still, MA counts happily, core goes away.

It appears that the parity errors are due to low (i.e. 1) signals for read data on the memory bus. Perhaps the high resistances of drain wire coax has gotten to us? TV camera might work, as disk reads OK.

11.45 3 Jan 68

630 lines 2 & 6 don't work.

Can transmit to teletype, but not from teletype.

14.30 All 630 lines but 3 now work.

4706 is removed from line 3 and closes.
1500 3 Jan 68

Tested TV camera in sample case—works
All joints of arm work with A-D and
motor control.

MAG TAPE doesn't work
167 doesn't work TO DISK
DP holds down IO Burst when turn
on.

Amplex cores not tested
TV Pan—tilt not tested
Audio System Not tested
Music or Speech

LRR

1530 3 Jan 68

Set up tape recorder under
support for electronics cabinet end
of rotating element cabinet of telescope
disk. See Plate requested
a temp. record to help find the
perm. read failure

LRR

2400 3 Jan 68

Closed MAG TAPE problems on 516
Found 5-flop was not getting reset
to CS or TCR by IO reset. Condition
was solid and independent of the state
the 5-flop was in. Grounding CS TCR
would reset the 5-flop. Tried replacing
4112 in 3D25, No change. Tried replacing
4115 in 3E20, No change. Found
IOB Reset at 516 is only 1.8V high—this is
too low, but probably ought to work.

amplitude at cp is 2.5v.

Resistance of signal wire from cp to
516 is 8.15 omega. This does not explain why 1.7V is lost.

MAG TAPE still doesn't work.

645 4 JAN. 68

CORE 2 DROPPING R1. HALF...

REPLACED BALUN 1 J 13

(LAST SPARE!!). TROUBLE

MAY BE IN CONNECTOR, NOT BOARD.

2. Mr. P

1000 4 Jan '68

(Have been running machine diagnostics for the
last hour.) Are running BLT.

Have cleaned the contacts on Balun board 1 J 13
(from CORE 2) and re-installed it. We have
run the BLT test ~ 10 minutes & have not had
a failure... Will leave the original balun board
in 1 J 13 - CORE 2.

J. Pleasen
Jan 4, 1968

Have just run DCTEST, UTEST, and EXDATA test to determine how well the DEC TAPE system is running. B: All tests ran without errors.

J. Gleason

Jan 4, 1968

Re-initialized System after spend the last 3 hours learning to run diagnostics. We spent the last hour setting up the test for the Manchester Reader/Writer on the Type 4523 board on the DEC TAPE Controller. No adjustments were made. However, we did observe the correct waveform:

J. Gleason

12:32 Jan 4, 1968

TV '4' drops low order bit sometimes (A goes as @)

17:10 Jan 4, 1968

ISS does not run - goes into loops TS MAIN dies as ERROR IV JOB

ILLEGAL

BLT runs ok. DECTAPTEST- EXDATA also

Note: TS BLT 11 is out

18:30 Jan 4, 1968

System died reliably on typing "RUN DTA" -
BLT ran
TS MAIN said "ERROR IN JOB 1"
DECTAPE TEST Ran
TS Menu. Ran for 15 min.
BLT looped at 111 because of ill men. reff...

Mystery will return.

2400 4 Jan 61

Larting around 1900 started getting mysterious deaths in the system. 6/7% random errors in diagnostics especially part 5 which had consistent problems with simulated results not agreeing with each other.

Eventually we got a solid dropping of bit II. Traced it to 6205 in 20E 18 (bit II) pin was intermittent. Removed bus stripping from 6205's for 1 1/2 found 6205 in 2011 loose. Found 4 cold soldered joints on 6205 in 20E 18 explaining the dropping of bit II and the famous MI bit II bug. Found several questionable solder joints on connector. Replaced bus wire on spare 6205 and the one in 20E 11. Resoldered all bus wire to PC board connections on the 3 modules. Reinserted boards. Discovered that the bus stripes on deck of 6205's are not insidiously different in both cases the 2 ground leads together are on the bottom.
<table>
<thead>
<tr>
<th>TOP</th>
<th>Bottom</th>
</tr>
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<tbody>
<tr>
<td>A +</td>
<td>47 Ω</td>
</tr>
<tr>
<td>B 47 Ω</td>
<td>56 Ω</td>
</tr>
<tr>
<td>C 47 Ω</td>
<td>56 Ω</td>
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<tr>
<td>D 56 Ω</td>
<td>56 Ω</td>
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<tr>
<td>E +</td>
<td>56 Ω</td>
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<td>56 Ω</td>
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<td>56 Ω</td>
</tr>
<tr>
<td>V +</td>
<td>56 Ω</td>
</tr>
</tbody>
</table>

The 6205's deserve the same treatment as the 1664 + 1665's.

LER

Modified Pt 5 of inch test in 75 MAIN and saved it on file 2 of type 365

LER

15/5/68 0115

EMPTIED LPT CLUTCH DUST CUP.

2/3 FULL

D. W. P.
0140 5 Jan 68

TRYZD drops characters on output
when old. Also garbles

A → 0
D → nothing

HRR

1230 5 Jan 68

Took machine off 1020 to re-solder
6205's + 6615's.

Investigated low signal level on
I0B reset. Found that there was
just low signal explained by 15-ohm
resistance of co-ax center conductor
and 100 Ω terminator. Found that
the looking was sufficient for things
to work without terminator. Removed
terminator. The other pulse lines
and terminated signals on the ICB
should be checked when the computer
is up again.

HRR

14120 5 Jan 68

Looked at DP while computer was down.
Found R147 in scanner not working right - replaced.
Some problem so looked some more. Found no
+10 on entire DP. Shut off +24Vdc since no
date or power supplies.

M. C. M.
Line 7 in 630 has questionable receiver (with tag on it).

1715 Attached missing +10V in J31 D.P. Found regular transistor and coil (transistor dead), replaced both. Added two resistors to circuit to protect against future gaps, +10 now reads +15, seem ok.

1720 5 Jan 68

Found that W102's in Ampex interface are signal eaters when power is off.

167 & 166 work much better (memory bus wise) with power on in Ampex interface.

D. W. P.

1245 6 Jan 68

D Pote forgot to log that he tried to bring the computer at 0030 and plugged the wrong 615-6 into the wrong place. He then gave up in disgust, according to informed sources. Power has been off on the computer since about 1800 yesterday. Telescopic interior temp is 90°F.
I have seen it as high as 90° but 90° failed to have record if

1700 Jan 6, 68
CP brought up with 6205's.

1830 Inserted 6615's. with 6615's.

1950 Found cold solder on internal jumper on 6615 at 24515

2220 Found unsoldered (open) eyelet on 6205 bit 8
Quoting a famous 20th century philosopher:

"DOOM!"
The little old ladies strike again

2330 Bit 35 swagging input appeared to not get swing L→R pulse, but the bug disappeared before our very eyes.

"DOUBLE DOOM"
We All  Quit!!

An infarct should be in the 3rd bone with sutures placed in the wire until a cold suture joint occurs.

S Russell recommends:

mpt 1-1331

I recommend:

DOOM
0700  7 JAN '68:

After 7 hours of careful prodding, PDP-6 seems to be up (despite best efforts of SRR and crew). Found 3 bad 6205's, fixed one (now bit 35); trouble was soldering hackery during GREAT SOLDER WARMING SIEGE.

One mysterious bug disappeared for no apparent reason: carry dropping between bits 2 and 1.

Ran all parts ins. test briefly; also time-shared VINSY 5, B175T.

Finally, lest this volume of the mighty saga end on a note of undue optimism, let none forget this word: though this be an hour of triumph, the forces of EVIL are not vanquished, and under each bedsheets board, behind every Buss connector, and in all dark places of the world, waiting ever to trap the unwary loser, there lurks omnipresent, implacable DOOM!!