To:　　　List of Attendees

cc:　Winograd

Subject:　FORUM Minutes for May 1, 1973

Attendees:　WJ Burner　　　RM Gross　　　RA Roach
　　　　　　CT Clingen　　　RE Hoffman　　LJ Ryan
　　　　　　RC Daley　　　　ED Kleinow　　JR Steinberg
　　　　　　JW Gintell　　　JR Ohlin　　　SH Webber

H6180 Hardware Status

--of the four known processor bugs remaining, only one is deemed to
　be "critical".
--SCU-B/Store-B had a parity error, the first one in the past four
　weeks or so.
--we've been experiencing a considerable number of Bulk Store problems,
　but our understanding of the problems has improved substantially;
　we now suspect an internal cable connection as the major remaining
　source of trouble.
--tape drive #E is still not fixed, even though all the logic and the
　R/W head has been swapped-out; a replacement handler has been placed
　on-order by Gross.
--40% of the FCO backlog was cleaned-up in the past week.
--the Card Reader problem was diagnosed as being caused by a bad
　lamp diode.
--PRT300 difficulties originated with either a bad VFU tape or an
　intermittent lamp, but with no on-line T+D's this was not realized
　until after many other paths had been explored--(the train was
　cleaned, a cog was slipped, we "lost" the clutch on ribbon reverse,
　etc.)--running OK now after two shakey days of operation.
--other potential hardware problems were identified (IOM writing same
　page into two different areas of memory, difficulty with Area-∅
　on DSU190) and are being explored.

H6180 Software Status

--there are a few 355 software problems in a 2-CP environment.
--all known software bugs will have been fixed by tomorrow morning,
　per Webber.
--Bulk Store Reconfiguration is all checked-out.
--HSLA (ARDS) software is "nearly complete"--Daley to check with
　Saltzer on the control of this and other projects which are being
　performed by MAC personnel.
--recent modifications to the Area Package have introduced bugs into
　the previously checked-out Card I/O software; fixes for the new
　bugs will be incorporated into the system this week.

Communications, Consoles, Terminals

--Ryan requested help from Ohlin to connect the 28 new lines into
the 355.

--the two TERMINET terminals have now arrived, but one has no table
or pedestal.

Progress on Service

--the most critical hurdle is being able to reconfigure and run
a 2-CP system.

--there were 23 system crashes from 4/23 through 4/29; 10-hardware,
9-software, and 4-other.

--Daley brought out the issue of whether we revert to an MIT-
generated system or to a Honeywell-generated system when we get
into trouble. After extended discussion, it was agreed and
acknowledged that Service will generally be run with an MIT system,
and that fall-back position is to the previous MIT system; only
in cases of dire emergency will we resort to the Honeywell version.

--Roach encountered some problems in running the performance measure-
ment tests last week, will be running them on third shift this week.

--ALM, Runoff, BCPL and LISP have not yet been properly submitted for
inclusion in the 6180 system; Daley to check with Saltzer on this.

--an updated bugs list is attached.

--Roach reported that almost everything on his list of "Requirements
for Start of Trial Service" has been completed and that the un-
completed items are in progress and under control.

--by tomorrow, Burner will generate a list of requirements to be
satisfied prior to the start of the so-called Endurance Test Period.

--May 14th still looks good for start of Trial Service.

Tech Square is all "OK".

Miscellaneous

--it was reiterated that there are no "spare" DSU190 drives on-site;
when one of MIT's seven drives is "down", the whole Service System
is "down" (even though the CISL drive is on-site and connected to
the system).

R. E. Hoffman
Account Manager, MIT

REH/kmp

his segment lists some of the known bugs in 6180 Multics.
or a list of known hardware bugs type "help hardware_bugs".

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189  05/01/73  2        bug in freen_  (when freeing an area part of which has been freed - see G. Dixon)
188  05/01/73  2        bug in command processor: ioa_ [date_time]"string" produces a quote in the output
186  04/29/73  1        need way to "flush" paging device ignoring errors
185  04/26/73  2        "cwd <>dir" causes a blank to be inserted in wdir name
184  04/25/73  1        emergency interrupt from 355 if operator's console types too much
183  04/25/73  1  sub   crecho mode can/does cause hangups again
182  04/19/73  1        card input does not work reliably
181  04/19/73  2  sub   Salvager deletes all links if date/time bad
180  04/18/73  2        quitting out of runoff can get a fault_tag_1 ref stack_4134316 by bcpl_alm_147
169  04/10/73  2  sub   errors in admin mode can prevent operator from entering admin mode again
167  04/06/73  3        *backup gets an error when trying to terminate a MSF
166  04/06/73  3  sub   down (probably bump * *) hangs up dialed consoles attached to the system
165  04/06/73  2  mlg   *tssi_ removes "*.SysDaemon.*" from ACL of object segment.
164  04/05/73  2  ab    PL/1 I/O does not add ACL's on segments "file_segment_1" and above for keyed segments (-?
160  04/03/73  2        absentee processes get terminated for no apparent cause
159  04/02/73  2  sub   *salvager does not correct non-ascii ACL's (which are illegal to Multics)
158  04/02/73  1  sub   *Problems with punch output (get many 7-9 punched cards with nothing else)
156  03/31/73  2  dc    sac seemed to crash the system (ERF #271)
154  03/29/73  2  eds   *deleteforce loops if cannot give access
152  03.28.73  1  sub   Cannot QUIT I/O Daemon more than once (need cleanup handler in mrdim)
                        prtdim_ is not an entry point in prtdim!
149  03/28/73  2  sub   terminate_process has to recognize new termination codes plus print correct logout messa
143  03/28/73  2  sub   *reloader must be able to force access
141  03/28/73  1  sub   *need reloader option (for carry) to prevent reloading of quotas
140  03/28/73  1  sub   *need reloader option to force loading a segment (ignoring dtm)
139  03/28/73  1  sub   *nd_handler gets access error when trying to unlink link to a MSF  (should get no error)
136  03/27/73  3        *copy command doesn't copy segments correctly if no status access on containing directory
135  03/26/73  3  eds   pae needs to be modified for daemon_user_table
134  03/25/73  2  vv    cpo gets "a not found in ring 0." (improper call)
126  03/21/73  2  sub   ARDS do not work
025  03/21/73  1  dmw   there are not enough "idle" characters for 300 baud lines (04/13/73)
014  03/13/73  2  rbs
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* - problem believed to exist also on 645 (not a new bug)

(END)