

TO: Distribution  
FROM: George T. Williams  
DATE: September 16, 1977  
SUBJECT: Installation of MSS 31.15

### I. SYSTEM CHANGE LOG

#### MCR MODIFICATIONS FOR MSS 31-15

- 2887 Fixes a bug in syserr log (syserr\_real) so that lost '=' messages get printed correctly.
- 2709 A change has been made to the disk software in Multics to provide a mechanism for automatic channel removal. The software will stop using any disk channel which gets repeated errors of a type attributable to channel or controller malfunction.
- 2854 Fixes a bug so that bootload-time memory page deletion as per the CONFIG card is obeyed.
- 2802 Fixes a bootload CPU deletion AST problem. No longer delete or deactivate PRDS's.
- 2832 Non-operational MTS500 tape drives will be deleted automatically.
- 2748 Page control is made more stable with respect to ESD thus making ESD far more reliable.
- 2540 Removes some obsolete disk metering code.
- 2877 The hardcore portion of better page-fault error signal\_message.
- 2878 The hardcore portion of improvement to main memory reliability flush strategy.
- 2882 Fixes a macro bug in page\_error.
- 2946 Fixes a bug in alloc\_ that prevented allocations of size 2\*\*17 - 2\*\*18.

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## I. SYSTEM CHANGE LOG (continued)

## MCR MODIFICATION

- 2944 Fixes a bug in the new backup which ruins vtoces as well as a bug in part 3 updating in the new salvager.
- 2950 Fixes a bug in message generation.
- 2952 Fixes an unlock bug.
- 2953 Fixes a mismanagement of initializer's bootload-time address space.
- 2954 Allows the dumper to go past connection failures; bug introduced in 31.13.
- 2955 Fixes "online salvage when stack deleted" bug; allows dl cmd to delete dirs with connection failures.

## II. SEGMENT CHANGE LOG

SEGMENT NAME		BOUND SEGMENT
alloc_.aim	R	bound_sss_wired_
bulk_store_control.aim	R	bound_page_control
bulk_store_init.aim	R	bound_temp_1
collect_free_core.pl1	R	bound_temp_1
core_queue_man.aim	R	bound_page_control
delentry.pl1	R	bound_file_system
device_control.aim	R	bound_page_control
disk_control.pl1	R	bound_page_control
disk_init.pl1	R	bound_temp_1
emergency_shutdown.aim	R	-
evict_page.aim	R	bound_page_control
get_disk_meters.pl1	D	bound_page_control
hardcore.header	R	-
hphcs_.aim	R	-
lrit_sst.pl1	R	bound_temp_1
lritialize_kst.pl1	R	bound_process_creation
lcl_usurp_channels.pl1	R	bound_lom_active
meter_disk.aim	D	bound_page_control
page.aim	R	bound_page_control
page_error.aim	R	bound_page_control
page_fault.aim	R	bound_page_control
pc.pl1	R	bound_page_control
pc_recover_sst.pl1	A	bound_page_control
pd_util.aim	R	bound_page_control
rcp_init.pl1	R	bound_io_init
salv_check_vtoce_.pl1	R	bound_salvager
salv_directory.pl1	R	bound_salvager

## II. SEGMENT CHANGE LOG (continued)

SEGMENT NAME		BOUND SEGMENT
scas_init.pl1	R	bound_temp_1
scs.pds	R	-
star.pl1	R	bound_file_system
start_cpu.pl1	R	bound_hc_reconfig
stop_cpu.pl1	R	bound_hc_reconfig
syserr_real.pl1	R	bound_error_wired
tc_init.pl1	R	bound_init_1
vtoc_attributes.pl1	R	bound_system_faults
vtoc_man.pl1	R	bound_vtoc_man

## BIND SEGMENTS

bound_page_control.bind	R
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## INCLUDE SEGMENTS

add_type.incl.pl1	R
cmp.incl.alm	R
cmp.incl.pl1	R
dskdcl.incl.pl1	R
null_addresses.incl.pl1	R
ptw.incl.pl1	R
pxss_page_stack.incl.alm	R
scs.incl.pl1	R
ssf.incl.alm	R
ssf.incl.pl1	R