Identification

Corrigenda, BD.9.01
R. M. Graham, M. A. Padlipsky

passim Error return label arguments are no longer used. In all cases in which they appeared, they are replaced by non-zero values in the error code arguments if errors arose in the called procedures. A zero value in an error code indicates successful completion.

p.3 The second sentence of step 1, currently ending "and 'validation level'", should end

return location (from oldsp|20), and "validation level".

p.3 References to the Segment Housekeeping Module should be taken as references to the Segment Management Module.

p.3 The last two sentences of step 1 should be replaced by

Each entry in <rtn_stk> is of variable length, in order to allow the Fault Interceptor to use it for secure storage of machine conditions; a diagram of <rtn_stk> is to be found in Figure 6. The index of the last (most recent) entry is kept in <rtn_stk>|0; this index is known as the "invocation number" (see BD.9.00).

p.4 The portion of step 2 at the top of the page should read

```c
    call get_ring(address,ring,new_ring,type,
error_code);
```

where address is a pointer to the location being transferred to, ring is the ring number of the faulting procedure, new_ring is a return argument which will be set to the ring number of the target procedure, type is a return argument which indicates whether address is a gate or a door (cf. BD.9.00,BD.9.05)
and err_code is a return argument which will be set to a non-zero value if the attempted crossing is illegal - the specific value indicating the specific kind of illegality. (After determining that the ring relationships are permissible, get_ring also checks that the specific transfer at hand is directed at a legitimate entry point - or "gate". The file system maintains lists of gates for segments; see also BG.9.00.)

p.5 The following should be appended to the first paragraph of step c:

However, in order to prevent an access fault during the return sequence when the bases are restored, the old stack pointer must not be preserved in the new frame. (It points to a segment which will in general be inaccessible from the new ring.) Therefore, newsp|6 and newsp|7 are overwritten, the new value being newsp.

p.11 An updated calling sequence for appendb will be found in BG.8.02.

p.11 In the first line of the last paragraph on the page, "set to 8" should be "set to point to <stack_n>|8".

p.17 Add Figure 6, attached.
Figure 6: Structure of `<rtn_stk>`

```
< rtn_stk >

0

length  last entry

oldring  validation level

oldsp  its

return location

machine conditions

...

machine conditions

length
```