

- 14 -

- 1 If more than 47 features are defined, multiple calls  
are made by specifying WORDNUM = 2 for features 48-94,  
WORDNUM = 3 for features 95-141 and so forth. Using  
the equations given above, the feature number is defined  
5 by (Bit# + 47(WORDNUM - 1)). The last MCPTCUFEATURES  
word sent specifies LASTCALL = TRUE.

When a feature bit is assigned, it is  
characterized by both the MCP and TCU microcode as either  
optional or required. Required features must be supported  
10 by both the MCP and TCU microcode. If a required feature  
is not mutually supported, the MCP will DEADSTOP the  
system. Optional features need not be supported by both.  
If an optional feature is not supported by both the MCP  
and TCU microcode, the feature is not used. For each  
15 call to this interface, the TCU microcode returns its  
corresponding MCPTCUFEATURES word as specified by WORDNUM.

Thus it is appreciated that this MCP to TCU  
function interface is defined to support feature  
coordination.

- 20 Referring to Figures 3(a) and 3(b) with continued  
reference to the preceding figures, a flow chart is  
illustrated describing how the TCU\_EXCHANGE\_FEATURES  
interface 16 is used during system initialization, IOM  
reconfiguration and microcode load by both the MCP and  
25 TCU microcode. The initial value of <n> is "1". In  
the flow chart, comments are preceded by "%".  
Additionally, a data word followed by "&<k>[<b>:1]" is  
a bit set operation. It sets bit <b> to <k> where k  
is 0 or 1. The blocks of the flow chart illustrated  
30 in Figure 3(a) are identified by reference numerals  
100-104, respectively, and the blocks of the flow chart  
illustrated in Figure 3(b) are identified by reference  
numerals 110-114, respectively. In branching blocks  
102-104, 110, 111 and 113, the left hand branch is  
35 denoted by the suffix "a" and the right hand branch is  
denoted by the suffix "b". Blocks 100 and 110-114  
describe actions occurring in the MCP environment. Blocks