JAA/FAA/TCCA International MRB Policy Board Issue Paper

Date 24/05/2005 IMRBPB #84 Rev 1 dated June 2005

Title:	Hidden functions of safety/emergency systems or equipment MSG-3 category selection
Submitter:	Air Transport Association (ATA) of America
Issue:	ATA is seeking concurrence from the IMRBPB regulatory authorities to modify the MSG-3 document item 2-3-5 when it makes reference to which category the Hidden functional failures of safety/emergency systems or equipment is to be selected.
Problem:	The current MSG-3 document item 2-3-5, part 3 states: "For hidden functions of safety/emergency systems or equipment, the additional failure is the event for which this function of the system or equipment is designed, and in these cases, a FEC 8 is to be selected." This statement can lead to the interpretation that every hidden function failure MUST be selected as FEC 8. That is not true when the system analysed is fault tolerant and a FEC 9 is to be selected.
Recommendatio	on: IMRBPB should approve the revision of the statement to: <i>"For hidden functions of safety/emergency systems or equipment, the additional failure is the event for which this function of the system or equipment is designed, and in these cases, where the system is not fault tolerant, <i>a FEC 8 is to be selected.</i> For fault tolerant systems, if the system failure remains hidden after the failure of all redundancies, a FEC 8 is also to be selected.</i>

IMRBPB Position:

October 20th, 2005

The PB would prefer the following wording:

"For hidden functions of safety/emergency systems or equipment, the additional failure is the event for which this function of the system or equipment is designed, and in these cases, where the system has no redundancies, a FEC 8 is to be selected. For redundant systems, if the system failure remains hidden after the failure of the first redundancy, a FEC 8 is also to be selected"

Status: Closed

Important Note: The IMRBPB positions are not policy. Positions become policy only when the policy is issued formally by the appropriate National Aviation Authority. (JAA, FAA or TCCA)