## **RESTRICTED - SERVICE INQUIRY**

## PART 1.6 - CONVENING AUTHORITY COMMENTS

- 1. I am content that the Panel have conducted a thorough and objective Inquiry into this accident and, in the main, I endorse their Findings and Recommendations. The Panel are to be commended for their examination of the available evidence and for their professionalism in interpreting it. My role in reviewing their Report is to draw the key lessons together and attempt to highlight the most important areas to everyone involved in Air Safety, with the aim of preventing recurrence.
- 2. The Panel have made good use of Prof Reason's seminal work on Human Factors modelling and have deduced the cause of the accident and a significant number of Contributory Factors, which they have categorized variously as unsafe acts, influences and breached defences. In all but one case, the Panel have categorized acts, whether intentional or unintentional, as slips, lapses or mistakes. Whilst I concur these individual categorizations, I believe they must also be seen in the context of what I consider to be the primary contributory factor. On the evidence presented, I determine this to be the 'intentional unsafe act' of individuals signing for having read and understood safety-related documentation and guidance when they had not. The Panel have categorized this as a mistake but, in my view, the correct categorization is as a 'violation', as in the Panel's definition of a "deliberate and conscious departure from established rules/procedures, although often with no intent to cause harm." An individual signing as having read and understood a list of documents that he hasn't is a conscious act.
- 3. Moreover, it was on the basis of individuals signing as having read and understood such safety-related documentation that they were authorised by SEngO to conduct after flight servicing. It might reasonably have been expected, therefore, that if the accident crew, or even some of them, had read and understood the relevant documentation, the requirement for and the importance of conducting the mandated checks of the MRGB cowling diligently would have been obvious to them all. In my opinion, this would also have constituted reason to expect that at least some of the six subsequent unsafe acts that the Panel attributed to the crew and assessed as contributory might not have occurred, the absence of any one of which may have broken the proverbial accident chain. That said, there is also a responsibility on supervisors to ensure that the requirement to be familiar with documentation is kept to that which is pertinent to the task in question and that 'catch all' requirements are avoided as unnecessary, ineffective and, potentially, a distraction from critical information.
- 4. The Panel's Findings more widely, including the Other Factors they have identified, paint a picture of an environment, albeit potentially localized, where non-compliances were tolerated. Notwithstanding the original act in relation to reading and understanding safety-related documentation, multiple divergences from established rules and procedures; failures to carry out actions and checks diligently; and shortcomings in airworthiness-related communication were evident. Some individual omissions may in part have reflected the relative inexperience of members of this particular crew, but taken together they perhaps point more to cultural factors. One may have expected the supervisory construct to have catered for crews' experience levels, but the Panel also found it necessary to highlight shortcomings in the supervision on the day.
- 5. Conscientious implementation of the Panel's Recommendations should ameliorate the identified shortcomings. Moreover, I am aware of, and gain some confidence from, the fact that significant work was undertaken quickly in the Puma Force to address the issues exposed early on in this Service Inquiry via its periodic progress reports. As is now the norm, Hd MilAAIB will track implementation of the Recommendations and report to me on progress regularly.

