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PART 1.7 – REVIEWING AUTHORITY COMMENTS

1. The Service Inquiry Panel has produced a comprehensive report in tragic circumstances. I agree that the cause of the accident was controlled flight into terrain (CFIT) and I support all of the recommendations made by the Panel and AOC 1 Group.

2. The findings of the Panel, into this distressing accident, need to explain why an RAF crew failed to maintain safe separation from the terrain. In this respect, although there must be a degree of conjecture, I accept the Panel's conclusions as amplified by AOC 1 Gp's analysis; I agree that the 3 elements that contributed most to this tragic accident were hazard recognition, aircraft handling and pilot experience.

3. Notwithstanding a serviceable Ground Proximity Warning System (GPWS), which by its known characteristics can produce false positive alarms when manoeuvring dynamically, close to mountainous terrain, the crew failed to recognise the hazardous situation in time to take effective recovery action. I agree that the pilot's experience level was a factor, but the RAF has long experience in safely managing this known risk and CFIT is very rare. Other factors also exacerbated this risk. In failing to recognise the hazard, visual illusion seems to have played a part. I have, therefore, instructed the RAF Flight Safety staff to refresh training material on this subject, in light of this accident, and to institute a regular publicity campaign to cover all aircrew who are required to fly at low level.

4. The attempted flight path was marginal at best but the weight and configuration of the aircraft made it even more challenging. The aircraft was heavy and throttle handling caused a loss of energy, which was aggravated by the wing sweep position and the consequent lack of manoeuvre flap. It is most likely that this configuration was simply a mistake. Therefore, the aircraft handling at low level was also a factor, aggravating a false assessment about the turning capability of a heavy Tornado F3. An additional, but unproven, factor is the pilot's familiarity with the area, which may have led him into starting a turn into a valley that someone less familiar with the geography would have attempted with more caution. This may well have been an important factor leading to the tragic outcome.

5. Even with the benefit of an Accident Data Recorder and the testimony of the aircraft following closely behind ZE982, we cannot say for certain why the crew lost their awareness of hazardous terrain in their flight path. The Panel has constructed the most likely chain of events. The margins for error are small in military aviation and we must therefore ensure that these contributing factors are widely understood within the Service. The loss of two of our people demands no less. I add my own condolences to the families of the deceased for their loss.

Sir Chris Moran
Air Chief Marshal
Commander-in-Chief
Air Command

3 March 2010

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