



# MINISTRY OF DEFENCE

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## Military Aircraft Accident Summaries

MAAS 4/83

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### AIRCRAFT ACCIDENT TO ROYAL AIR FORCE HARRIER GR3 XV 807

Date: 14 July 1981  
Parent Airfield: RAF Belize  
Place of Accident: 7 km S of Georgeville, Belize  
Crew: One pilot  
Casualties: One killed

#### CIRCUMSTANCES

1. A Flight of RAF Harriers is stationed in Belize to provide local air defence and offensive support (OS) for ground forces. One of the Flight's routine training tasks is to fly simulated ground attack missions under the directions of a Forward Air Controller (FAC). This provides training for both the FAC and the pilot in the particular tactical techniques employed in Belize.
2. The pilot had been detached to Belize once previously during his tour. On 14 July 1981 he took off from Belize airport where the Flight is based for a routine OS training sortie. He contacted the FAC and was briefed to run in to the FAC's position, turn left and dive along a minor road running towards a saddle formed by 2 small hills. His target was 2 army trucks against which he was to simulate an attack with rockets. The pilot carried out the briefed attack but did not see the target early enough to complete this successfully. He pulled out of the dive and was advised by the FAC to turn left. The pilot did so but declined further control and instead turned in to dive at the target on a westerly heading, at right angles to the road. The trucks were parked in a narrow defile bounded to the East by a forest covered ridge extending to 250 ft above the level of the road. The saddle was formed to the West by a scrub-covered hill the top of which was 100 ft above the target level. The height of the ridge to the East meant that the pilot would need to achieve a dive angle of at least  $28\frac{1}{2}^\circ$  for him to see the target,

which is steeper than the usual Harrier attack profiles. The pilot completed an apparently successful attack, overflew the target and cleared the 100 ft hill to the West by an estimated 20 ft during his pull out. However, the aircraft was still descending; it struck the top of a tree lower down the slope and hit the ground in a flat attitude, disintegrating on impact. The pilot sustained multiple injuries and was killed; it was established that he had not initiated ejection.

#### CAUSE

3. The Board of Inquiry, assisted by AIB, determined that during the final stages of flight, the engine had been running at high power and that the aircraft was being flown at near maximum performance. There were 19 eye-witnesses to the attack; 5 of them thought that they had seen something fall from the aircraft during the dive but a protracted search of the jungle beneath the aircraft's flight path was fruitless. Furthermore, 14 witnesses did not see anything fall from the aircraft although 5 of these did not observe the whole of the attack profile. The Inquiry was able to determine that the aircraft was recovering at 6g when it hit the ground and the AIB aircraft showed that no major in-flight structural failure had occurred. It was established that the pilot had initiated a relatively slack pull out before <sup>h</sup>coverting this to 6g. There was no evidence on which to determine the reason for this, but the Board of Inquiry postulated that the pilot could have experienced a temporary pitch control restriction which prevented him from starting his recovery at the usual rate. It was acknowledged that a contributory factor was the pilot's choice of attack heading, which had made it necessary for him to dive much more steeply than normal. This would have caused the aircraft to accelerate more rapidly, reduced the time available for the pilot to track the target with his gunsight and resulted in a significant reduction in the margins available to effect a safe recovery. However, it was concluded that it was well within the Pilot's competency to recognise the inherent dangers and that, had any emergency occurred, he would have attempted to pull out of his dive at an earlier stage. Thus, it has not been possible to determine the reason why the pilot failed to make a safe recovery from his attack.

#### CLAIMS

4. Compensation in the sum of £487 has been paid in respect of damage incurred during the recovery operation.