



MINISTRY OF DEFENCE

Military Aircraft Accident Summary

20

9 February 1993

MILITARY AIRCRAFT ACCIDENT SUMMARY

PUBLISHED BY THE MINISTRY OF DEFENCE

AIRCRAFT ACCIDENT TO ROYAL AIR FORCE

TUCANO T MK1 ZF316

Date:	12 May 1992
Parent Airfield:	Royal Air Force Scampton
Place of Accident:	11nm South East of RAF Lossiemouth
Crew:	Two pilots
Casualties:	One with major injuries and one with minor injuries

CIRCUMSTANCES

1. During the afternoon of 12 May 1992, the two-man crew of Tucano T Mk 1 ZF 316 were practising spinning to the South East of RAF Lossiemouth in near perfect weather. During the recovery from a spin, with the aircraft in a near vertical dive, it suffered a marked nose-down pitch into inverted flight. The aircraft then oscillated in pitch, experiencing large 'negative-g' forces.

2. Once in level, but inverted, flight, the captain rolled the aircraft erect. He then moved the control column fore and aft, attempting to evaluate control effectiveness, but he could not discern an appropriate pitch change. The aircraft again pitched down and the captain, believing that he had lost control of the aircraft, initiated command ejection at 4500 feet, the briefed abandonment height. Both ejections were successful. The aircraft dived into open farm land and was destroyed. Damage on the ground was minimal and restricted to crops and grazing land.

CAUSE

3. The investigation found that the aircraft's elevator trim was in the fully nose down position, thereby imposing high and unusual loads on the controls in the dive, preventing the captain from being able to recover the aircraft to controlled flight. The Board of Inquiry could not determine positively whether the nose down trim was caused by a malfunction or by inadvertent pilot operation.

SUBSEQUENT ACTIONS

4. Operating procedures have been reviewed, and the relevant instructional and aircrew manuals amended to provide better advice on trim runaways and inadvertent trim selection.

CLAIMS

5. Claims totalling £2,374.25p have been settled in respect of this accident.