Aviation Safety Investigation Report 199602399

McDonnell Douglas Corporation Eagle Airbus Airbus

30 July 1996

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number:	199602399	Occurrence Type:	Incident	
Location:	Tindal			
State:	NT	Inv Category:	4	
Date:	Tuesday 30 July 1996			
Time:	1538 hours	Time Zone	EST	
Highest Injury Level: None				
Aircraft Manufacturer:	Airbus			
Aircraft Model:	A340			
Aircraft Registration:	VR-HMS			Serial
Type of Operation:	Air Transport High Scheduled	Capacity Internation	nal Passenger	Number:
Damage to Aircraft:	Nil			
Departure Point:	Melbourne VIC			
Departure Time:	1305 EST			
Destination:	Hong Kong			
Aircraft Manufacturer: McDonnell Douglas Corporation				
Aircraft Model:	F-15			
Aircraft Registration:			Serial Number:	
Type of Operation:	Non-commercial O	ther (including milit	ary)	
Damage to Aircraft:				
Departure Point:	Unknown			
Departure Time:				
Destination:	Unknown			

Approved for Release: Monday, February 24, 1997

FACTUAL INFORMATION

An A340 aircraft had departed Melbourne for Hong Kong and was maintaining flight level (FL) 350 on the track segment DOSAM - TINDAL. This segment included passage through the military restricted area R244, during which time the aircraft was under military control and in radio contact with the Tindal centre air traffic control unit.

A pair of foreign military F-15 aircraft, callsign DOGSTAR, had been operating within the parameters of military exercise "Pitch Black 96" and were returning to Tindal aerodrome using the procedures specified for that particular exercise. These procedures required returning aircraft to operate between FL260 and FL290 and to contact Tindal approach control prior to 30 NM from Tindal.

Pitch Black 96 operating procedures included a general exclusion of military activities in R244 above FL 290 unless acting in accordance with specific air traffic control instructions. This exclusion was designed, amongst other things, to protect transiting civil air traffic. DOGSTAR formation had no such air traffic clearance or instruction.

At 1535 CST and when approximately 32 NM south east of Tindal aerodrome, the crew of the A340 reported a TCAS traffic advisory on unidentified aircraft crossing from left to right about 3 NM ahead and descending from a level approximately 800 ft above them.

Tindal centre were unable to immediately determine the callsign and flight details of the unidentified aircraft and coordinated with the Control and Reporting Unit (CRU) which would have had prior information on exercise aircraft. The CRU were also unable to immediately identify the aircraft.

The crew of the A340 then saw the other aircraft and reported that they were twin tailed fighters. They watched as the military aircraft passed in front of their aircraft at approximately the same level. No evasive action was required as they were able to monitor the progress of the formation clear of their projected flight path. Shortly after, Tindal centre confirmed that the formation had been identified as DOGSTAR and that they were now under Tindal control and clear of the A340.

Radar analysis indicated that DOGSTAR formation passed at a distance of 4.9 NM in front of the A340 and had descended from approximately FL 363 to a level below the A340 during the period of the TCAS alert. It also established that the occurrence happened in airspace between 25 and 33 NM from Tindal.

The appropriate separation standard in this airspace was either 3 NM horizontally or 2,000 ft vertically. This standard can only be provided when certain pre-conditions are met. Some of these requirements were that both aircraft are radar identified and both aircraft shall be on radio frequencies currently in use for radar control. These pre-conditions were not met in this case. There was also a procedure where the CRU is allowed to provide a separation service in conjunction with the military air traffic controller in military restricted airspace, however, the pre-conditions for this procedure were not met.

Whereas the proximity did not reduce below the 3 NM criteria, a breakdown of separation did occur because the military aircraft were not operating under air traffic control instructions and were not in contact with either air traffic control or the CRU at the time of the occurrence. Therefore the terms and conditions set out in the Manual of Air Traffic Services for such a separation standard had not been met.

The crews of the F-15 aircraft had chosen to maintain a higher than normal altitude for their initial recovery track because of other exercise traffic involved in air-to-air refuelling in the vicinity of their formation. They then obtained a radar "lock-on" on the A340 and, believing it to be another military aircraft returning for a recovery, positioned their aircraft to be number one in the recovery sequence.

ANALYSIS

The procedures set down for military exercise "Pitch Black 96" contained restrictions and requirements designed to ensure the protection of transiting civil aircraft. On this occasion, a pair of fighter aircraft contravened the procedures by maintaining an altitude above that approved, without informing either air traffic control or the CRU. This resulted in the aircraft flying in controlled airspace for approximately 60 track miles without an airways clearance and without being subject to a positive separation service. It also resulted in a civilian aircraft not receiving a guaranteed separation service from the military formation.

SIGNIFICANT FACTOR

The crews of the military formation contravened the published procedures for military exercise "Pitch Black 96".

SAFETY ACTION

The military authorities immediately suspended the exercise and reviewed the safety procedures. Local amendments were instigated before the exercise was allowed to continue.