

Follow-up Action on Occurrence Report

**ACCIDENT TO HAWKER HUNTER T7, G-BXFI, NEAR SHOREHAM AIRPORT, WEST SUSSEX,
ON 22 AUGUST 2015**

CAA FACTOR NUMBER : F1/2017
FACTOR PUBLICATION DATE : 3 May 2017
TYPE OF FLIGHT : Air Display
CAA OCCURRENCE NUMBER : 201511517
AAIB ACCIDENT REPORT : 1/2017

SYNOPSIS

The aircraft was taking part in an air display at Shoreham Airport during which it conducted a manoeuvre with both a vertical and rolling component, at the apex of which it was inverted. Following the subsequent descent, the aircraft did not achieve level flight before it struck the westbound carriageway of the A27.

This FACTOR is in response to **Accident Report 1/2017** which was published by the AAIB on 03 March 2017.

Recommendation 2017-001

It is recommended that the Civil Aviation Authority amend CAP 403 to clarify the point at which an aerobatic manoeuvre is considered to have been entered and the minimum height at which any part of it may be flown.

CAA Response

The CAA will amend CAP 403 to specify clearly the point at which an aerobatic manoeuvre is entered and to which the aerobatic minimum height applies rather than the flypast minimum. CAP403 will be amended accordingly by 01 May 2017.

CAA Status - Open

Recommendation 2017-002

It is recommended that the Civil Aviation Authority require pilots intending to conduct aerobatics at flying displays to be trained in performing relevant escape manoeuvres and require that their knowledge and ability to perform such manoeuvres should be assessed as part of the display authorisation process.

CAA Response

The CAA will develop and set out specific requirements for pilots intending to conduct aerobatics at flying displays to be appropriately trained in performing escape manoeuvres. Once the requirements have been set, CAP 403 will also specify the level of assessment of a pilot's knowledge of, and ability to perform, such manoeuvres as part of the display authorisation process.

The CAA will work with air display pilots to develop additional requirements by August 2017; as an interim step, CAP 403 will be amended by 01 May 2017 to introduce an assessment of the performance of escape manoeuvres as part of the display authorisation process.

CAA Status - Open

Recommendation 2017-003

It is recommended that the Civil Aviation Authority review the grouping of aircraft types in display authorisations to account for handling and performance differences it considers significant.

CAA Response

The CAA will review the list of different categories of aircraft relevant to a pilot display authorisation, including renewal, and assess the impact of differing handling techniques between each category. This is a complex piece of work and so we will conduct this review, publish our findings and amend our procedures by December 2017.

CAA Status - Open

Recommendation 2017-004

It is recommended that the Civil Aviation Authority should remind operators, whose activities are subject to the guidance published in CAP 632, of the need to maintain detailed training records for pilots and check their compliance during inspections it carries out.

CAA Response

The CAA will write to all operators whose activities are subject to the guidance published in CAP 632 of the need to maintain detailed training records for pilots. Furthermore the CAA will amend audit procedures to check for the proper maintenance of training records during audit. We will write to all operators and amend our procedures by 31 May 2017.

CAA Status - Open

Recommendation 2017-005

It is recommended that the Civil Aviation Authority specify that the flight demonstration requirement of a display authorisation evaluation, other than to assess formation following, cannot be satisfied by the pilot following another aircraft during the evaluation.

CAA Response

The CAA will amend CAP 403 to specify that the flight demonstration requirements of a display authorisation evaluation, other than to assess formation following, cannot be satisfied by the pilot following another aircraft during the evaluation. CAP 403 will be amended accordingly by 01 May 2017.

CAA Status - Open

Recommendation 2017-006

It is recommended that the Civil Aviation Authority undertake a study of error paths that lead to flying display accidents and integrate its findings into the human factors training it requires the holders of display authorisations to undertake.

CAA Response

The CAA is working with external experts to understand the influence of human factors on air displays. We will expand this work to include a study of error paths that lead to flying display accidents and integrate the findings into the display authorisation process and associated training and practice. This is a complex piece of work, requiring us to develop appropriate process and roll out to the air show community for safe implementation. We will complete this work by December 2017.

CAA Status - Open

Recommendation 2017-007

It is recommended that the Civil Aviation Authority review the arrangements for safety regulation and oversight of intermediate and complex ex-military aircraft operated in accordance with CAP 632, to ensure that they are consistent and appropriate.

CAA Response

The CAA will conduct a review of the safety regulation and oversight of intermediate and complex ex-military aircraft in conjunction with the requirements set out in CAP 632. We will work with the ex-military aircraft community on this complex and comprehensive piece of work, which will be completed by November 2018.

CAA Status - Open

Recommendation 2017-008

It is recommended that the Civil Aviation Authority consider implementing the changes outlined in Health and Safety Laboratory report MSU/2016/13 'Review of the Risk Assessment Sections of CAP 403'.

CAA Response

The CAA has considered the changes outlined in the HSL report on the 'Review of the Risk Assessment Sections of CAP 403' and included updated risk management guidance reflecting that in an amended CAP 403 published in February 2017. Additionally the risk assessment process is part of the new Flying Display Director (FDD) accreditation process.

CAA Status - Closed

Recommendation 2017-009

It is recommended that the Civil Aviation Authority requires operators of aircraft used for flying displays to identify, and where practicable remove, any hazardous materials.

CAA Response

The CAA will ask operators of aircraft used for flying displays to identify and where practicable remove any hazardous materials. Operators are already required to notify the Flying Display Director (FDD) of hazardous materials. The work on identification or alternatives and removal of hazardous materials will be more complex and we will aim to complete this work by April 2018.

CAA Status - Open

Recommendation 2017-010

It is recommended that the Civil Aviation Authority prohibit the use of phenolic asbestos drop tanks on civil registered aircraft.

Proposed CAA Response

The CAA will work with industry to see if and how alternatives to phenolic asbestos drop tanks on civil registered aircraft could be introduced. If there are no practical alternatives the CAA will instruct aircraft operators to ensure that hazard information is available to interested third parties. This is a complex piece of work, involving significant engagement with industry. We will report our outcomes by April 2018.

CAA Status - Open