

Simulation Of System Failures In Flight – ‘Pulling’ CBs

Issued under the Authority of:

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Background Information:

CAE is committed to achieving the highest level of safety by meeting or surpassing regulatory requirements, by auditing the safety implications of our activities, by identifying areas for improvement through incident reporting, investigation and risk assessment, and by encouraging the open and honest reporting of safety issues.

Abbreviations:

CAE OAA	CAE Oxford Aviation Academy
CB	Circuit Breaker
FCOM	Flight Crew Operations Manual
HT	Head of Training
NOTAC	Notice to Aircrew

Proposed Policy:

Failure of aircraft systems in flight is not to be simulated by the pulling of circuit breakers (CB).

Operation of CBs on CAE OAA aircraft must only be carried out in accordance with the normal and emergency sections of the appropriate aircraft checklist and is not to be used as a means of simulating system failures in flight.

Whereas the required training in dealing with sudden system failures can be carried out in the simulator, the operation of aircraft circuit breakers in flight to create the effects of system failures risks causing damage to modern avionics systems such as the Garmin1000. Moreover, CBs are not designed to be used as a switch with systems under load. They are not ‘snap-acting’ devices and can remain in a partially actuated position causing arcs. The use of a CB as a switch would also cause premature wear on the latching mechanism. ‘Pulling’ CBs to simulate failures can also introduce the risk of inadvertently disabling the wrong system(s) and is an unacceptable practice.

FURTHER ACTIONS REQUIRED BY EACH ACADEMY:

Each centre is to arrange for Examiners and Flight Instructors to be reminded of the acceptable means of simulating systems failures on aircraft in flight.

NOTAC VALIDITY:

This NOTAC will remain in effect until its content has been incorporated into the FCOM.

EXCEPTIONS AND REVIEW:

This policy may be reviewed by the Chief Safety Officer.

SCOPE:

CAE Oxford Aviation Academies