

# RESETTING OF CIRCUIT BREAKERS

## SUGGESTED PROCEDURES

### Boeing

#### **What is Boeing's recommendation for in-flight pulling and resetting circuit breakers.**

No procedure in current-production airplanes calls for the pulling (and resetting) of any CB. This omission defines our current thinking on pulling CB's. The following is an excerpt from BOECOM message B-V40M-490-0288 that describes our policy regarding 747-400 model airplanes, but this policy applies to all current-production (EICAS) airplanes.

“We have significant concerns about the use of circuit breakers to clear system anomalies. In addition to being detrimental to two-pilot crew workload it is contradictory to the certification basis for two-pilot airplanes. Further, there are other potentially significant problems-

- “pulling a circuit breaker could result in other systems becoming inoperative in addition to resetting the system in question. This is because some circuit breakers can be shared by several components or affect integrated systems. This may then result in additional EICAS messages and/or anomalies and a more complicated situation.
  
- “circuit breakers are neither designed nor located for use by the flight crew as switches. Specific circuit breakers may be difficult to locate or reach from a pilot/s seat, and they are not designed to withstand wear from routine operation. This situation could result in the wrong circuit breaker being pulled or loss of the proper function of the circuit breaker.
  
- “continued use of circuit breakers to correct system anomalies may mask the problem and preclude proper identification of an engineering fix. If flight crews become accustomed to pulling circuit breakers, they may be less likely to record problems in the airplane maintenance log.”

#### **What is Boeing's recommendation for resetting CBs that have tripped in-flight.**

To quote the 747-400 Ops Manual (the other models have similar wording):

“Flight Crew reset of tripped fuel pump and fuel pump control circuit breakers in flight is prohibited. Reset of any other tripped circuit breaker is not recommended unless in the judgement of the Captain, the situation resulting from the circuit breaker trip has a significant adverse effect on safety. These other tripped circuit breakers may be reset once, after a short cooling period (approximately 2 minutes). A ground reset of a tripped circuit breaker by the Flight Crew should only be accomplished after maintenance has determined it is safe to reset the circuit breaker.”