



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# SAFO

Safety Alert for Operators

SAFO 14006  
DATE 12/15/14

Flight Standards Service  
Washington, DC

[http://www.faa.gov/other\\_visit/aviation\\_industry/airline\\_operators/airline\\_safety/safo](http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo)

*A SAFO contains important safety information and may include recommended action. SAFO content should be especially valuable to air carriers in meeting their statutory duty to provide service with the highest possible degree of safety in the public interest. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO.*

**Subject:** Use of Tie Wraps and/or Collars on Circuit Breakers

**Purpose:** This SAFO serves to notify aircraft maintenance providers and operators about potential confusion to flightcrews that may result when using tie wraps or collars on circuit breakers.

**Background:** Federal Aviation Administration (FAA) Inspectors have noted that during completion of emergency procedure checklists, the flightcrew may have difficulty confirming the state of certain circuit breakers located throughout the cockpit. It is possible that a flightcrew member could be misled into believing a circuit breaker has “popped” when it has in fact been collared with a white tie wrap. The inverse is true for a circuit breaker that might appear to be normal, when it has in fact been collared with a black tie wrap rendering that system inoperative or non-powered.

**Discussion:** Maintenance personnel should make every effort to use contrasting color tie wraps or circuit breaker collars when deactivating aircraft systems by pulling circuit breakers. Tie wraps or collars should NOT be the same color as the indicator band on the circuit breaker (typically white or black) to prevent flightcrew confusion. “Inoperative” stickers should be placed near the deactivated system controls or on the instrument panel in full view of the pilots to ensure they are aware of the aircraft’s configuration change. Appropriate log book entries should also be made documenting the aircraft’s current airworthiness status.

Pilots should review the maintenance logbooks and dispatch releases to ensure they are aware of the current condition and configuration of the aircraft they are operating.

**Recommended Action:** Directors of Safety, Directors of Maintenance, Chief Pilots and Training Managers should review aircraft maintenance procedures and ensure that contrasting color tie wraps or collars are available for use. They should also ensure that flightcrews and maintenance personnel are aware of company policy concerning procedures to deactivate and identify inoperative systems.

**Contact:** Questions or comments concerning this SAFO can be directed to the General Aviation and Commercial Division, AFS-800 at (202)-385-9600