



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

October 1, 2014

Attachment 19 – A320 Warnings and Cautions

OPERATIONAL FACTORS

DCA14MA081

Source: USAirways A320 TM, 10.1.4 Electronic Centralized Aircraft Monitoring (ECAM).

System Description

10 JUL 13

Takeoff Configuration Warnings/Cautions. If the airplane is not properly configured for takeoff, the following warnings (red) and cautions (amber) are triggered when the T.O. CONFIG pb is pressed or when takeoff power is applied:

- SLATS/FLAPS NOT IN T.O. RANGE
- PITCH TRIM NOT IN T.O. RANGE
- RUDDER TRIM NOT IN T.O. RANGE
- SPEED BRAKES NOT RETRACTED
- SIDESTICK FAULT
- HOT BRAKES
- DOOR NOT CLOSED (tested only if engines are operating)

The following are only triggered when takeoff power is applied:

- PARK BRAKE ON
- FLEX TEMP NOT SET (not displayed if thrust levers are set in the TOGA detent)

ECAM Indications. When a malfunction is detected, the following occurs:

- The title of the malfunction is displayed on the left lower quadrant of the E/WD. The name of the affected system is underlined. Boxed items indicate primary malfunctions.
- The actions to be taken are displayed below the title.
- Other systems affected by the malfunction are shown on the right lower quadrant of the E/WD. An asterisk (*) indicates secondary malfunctions.
- The affected system page is displayed on the SD.
- The CLR pb is illuminated on the ECP.
- A local warning light associated with the affected system is illuminated.

If there is additional data that can not be displayed in the limited screen space, a green overflow arrow at the bottom of the screen directs the crew to scroll down. Scrolling is accomplished by pressing the CLR pb.

As the crew completes each action, the step clears from the screen. Actions that can not be monitored by the FWCs, do not automatically clear from the screen.

At the end of the procedure, pressing the CLR pb displays the affected System page for review. When all affected Systems pages are cleared, the STATUS page is displayed.

A review of the ECAM abnormal procedure can be accomplished by pressing the RCL pb. If any actions were not accomplished previously, they will appear on the E/WD.

If a system parameter exceeds its normal range, the system page is displayed on the SD and the parameter flashes in green.

ECAM Warning Inhibits. During takeoff and landing “T.O INHIBIT” or “LDG INHIBIT” memos are displayed in magenta to remind the crew that most of the failure titles and the associated checklists are suppressed. This prevents unnecessary distractions during critical phases of flight.

Takeoff (T.O.) Memo. The T.O. memo appears two minutes after the second engine is started or when the T.O. CONFIG TEST pb is pressed with one engine running. The memo is removed when takeoff power is applied.

Landing (LDG) Memo. The LDG memo appears below 2,000 feet RA with the landing gear down or below 800' RA with the landing gear up. (For aircraft with the new FWC, the LDG memo appears below 2,000' RA regardless of landing gear position.) The memo disappears after touchdown (80 knots).