

## Attachment 4

To Operations/Human Performance Group Factual Report

DCA11IA040

Avionics Smoke Procedure

**AVIONICS SMOKE**

**Condition:** Smoke is detected in the ventilation extract duct.

**Action:**

■ **LAND AT THE NEAREST SUITABLE AIRPORT.**

**Note:** Since smoke in the extract duct may be from the avionics or the air conditioning system, consider accomplishing the Smoke, Cabin/Cockpit QRC procedure. Suspect air conditioning smoke if smoke is entering the cockpit from the ventilation outlets or if smoke is detected following an engine or APU problem.

Follow this procedure to:

- Maintain airplane control
- Establish a smoke configuration
- Attempt to isolate and turn off faulty equipment, or
- If unable, or if smoke continues after 5 minutes, put the electrical system in the emergency configuration
- Attempt to restore electrics prior to landing

**IF PERCEPTIBLE SMOKE:**

If smoke is confirmed, the following procedure **must** be applied.

- Oxygen mask ..... On  
Ensure crew communication is established. Avoid the use of interphone position to minimize interference from oxygen mask breathing noise. Check oxygen diluter selector is at 100% and turn the emergency knob to remove condensation or smoke from the mask.
- BLOWER ..... OVRD
- EXTRACT ..... OVRD  
Avionics ventilation is provided by air conditioning system and extracted overboard.
- CAB FANS ..... OFF  
This prevents smoke from entering cockpit and cabin.
- GALLEY/GALY & CAB switch ..... OFF
- CKPT/CAB COM ..... ESTABLISH
- Signs ..... On
- Emergency exit lights ..... ON  
Provides minimum cabin lighting when the COMMERCIAL switch is turned OFF.

If **COMMERCIAL** switch is installed:

- Commercial switch ..... Off
- Faulty equipment (if identified) ..... Off  
Identify and turn off faulty equipment, if possible.

If **smoke disappears within 5 minutes**:

- **NORM VENTILATION** .....RESTORE

If **smoke persists after 5 minutes**:

- **EMER ELEC GEN 1 LINE** ..... OFF  
GEN 1 line contactor opens. Generator 1 supplies one fuel pump in each wing tank. Generator 2 supplies AC BUS 1 through the bus tie contactor.
- **EMER ELEC PWR** .....MAN ON  
RAT is extended and the emergency generator is connected to the airplane electrical system. Check emergency generator parameters on ECAM ELEC page (automatically displayed).

**WHEN EMER GEN AVAIL:**

- **APU GEN** ..... OFF
- **GEN 2** ..... OFF  
**ELEC** **EMER CONFIG**
- **MIN RAT SPEED** ..... 140 KT

**Note:** The electrical configuration is the same as for loss of both generators (except that one fuel pump in each wing tank remains supplied). See ELEC EMER CONFIG in the Emergency Procedures chapter for affected and inoperative systems.

- **VHF 1/HF 1/ATC 1** ..... USE  
Only VHF 1, HF 1 and ATC 1 are available in this configuration.

**Note:** On A320s with yellow-capped circuit breakers, if normal electrical supply is not restored prior to landing gear extension, the nav aids used for approach should be tuned on RMP 1 to prevent their loss at landing gear extension (FMGC is not powered in this configuration).

If on **A320s with yellow-capped circuit breakers**:

- **APU MASTER** switch (if APU not running) ..... OFF  
With APU MASTER SW selected ON, DC BAT BUS is supplied by the batteries.
- **AVOID ICING CONDITIONS**
- **FAC 1** ..... OFF THEN ON  
Rudder trim is recovered despite no indication.

**If on A320s with yellow-capped circuit breakers:**

- LDG ELEV .....MAN ADJUST  
Ensures proper cabin depressurization, whether normal electrical power is restored or not.

**BEFORE L/G EXTENSION:**

Restore normal electrical supply for landing.

- GEN 2..... ON
- EMER ELEC GEN 1 LINE ..... ON

**F/CTL ALTN LAW****(PROT LOST)**

Flight control normal laws and associated protections are lost. Only load factor limitation, high and low speed stability are provided.

- MAX SPEED ..... 320 KT
- EPR MODE FAULT N1 DEGRADED MODE ECAM message appears.

**STATUS**

Lower ECAM display is not available. Status page is displayed on upper ECAM if STS button is held down.

INOP SYS

- MIN RAT SPEED ..... 140 KT
  - MAX SPEED ..... 320 KT
- RUDDER WITH CARE ABV 160 KT

F/CTL PROT  
RUD TRV LIM  
YAW DAMPER  
RUD TRIM  
AP 2  
CAT 2  
FAC 2

APPR PROC

- MAX BRK PRESS ..... 1000 PSI
- FOR LDG ..... USE FLAPS 3
- GPWS LDG FLAP 3.....ON
- APPR SPD..... VREF + 10 KT
- LDG DIST PROC ..... APPLY

VENT BLOWER  
VENT EXTRACT  
AFT CRG HEAT  
AFT CRG VENT

ENG1 + 2 APPR IDLE ONLY  
ENG1 + 2 N1 DEGRADED MODE  
ALTN LAW: PROT LOST  
WHEN L/G DN: DIRECT LAW  
BOTH PFD ON SAME FAC  
CTR TK FUEL UNUSABLE  
INCREASED FUEL CONSUMPTION  
SLATS/FLAPS SLOW

----- **CHECKLIST COMPLETE** -----