

# Attachment 6

To Operations/Human Performance Group Factual Report

DCA11IA040

Emergency Electrical Configuration  
N401UA to N459UA

**ELEC EMER CONFIG (A320S N401UA-N458UA)**

**ACTION:**

**Note:** *The RAT will stall below 140 knots. Therefore, the emergency generator is disconnected at landing gear extension and electrical power is supplied by the batteries only. For other airplanes, see ELEC EMER CONFIG (A320s N459UA-N498UA) and all A319s.*

**LAND ASAP**

**CAUTION:** *The RAT will stall at a speed below 140 knots and electrical power will be supplied from the batteries only.*

- MIN RAT SPD ..... 140 KT
- GEN 1 + 2 ..... OFF THEN ON

**IF UNSUCCESSFUL:**

- BUS TIE ..... OFF  
Selecting BUS TIE switch to OFF isolates both AC busses.

- GEN 1 + 2 ..... OFF THEN ON  
If any generator reset is successful, reset both FACs.

The DC and AC essential busses remain supplied by the emergency generator. After landing gear extension, the emergency generator is no longer powered; DC and AC essential busses transfer to the normal electrical network. If landing gear is reselected UP, essential busses remain supplied by the normal electrical network.

- EMER ELEC PWR (if EMER GEN not on line) ..... MAN ON

**CAUTION:** *In case of simultaneous engine generator failure, the probability of a successful APU generator coupling is low; therefore, APU start attempts should be avoided as this reduces the flight time on batteries only (approximately 3.5 minutes for one start attempt).*

- ENG MODE SEL ..... IGN  
Engines are fed by gravity fuel feed only.

- VHF 1/HF 1/ATC 1 ..... USE  
Only VHF 1, HF 1 and ATC 1 are supplied in the emergency electrical configuration. FMGC 1 is temporarily lost, but can be regained through the MCDU MENU page.

- APPR NAV AID ..... ON RMP 1

- IR 2 + 3 (IF IR 1 OK) ..... OFF  
ADIRS 2 and 3 will be lost 5 minutes after the loss of both engine generators. Turning them off will save battery charge.

**FUEL GRVTY FEED**

Engines are fed by gravity only. Avoid negative-g factor.

**PROC : GRVTY FUEL FEEDING**

See Fuel Gravity Feed irregular procedure.

**IF TIME TO LDG > 5 MN and L/G is down:**

With L/G down, only the batteries supply the airplane electrical system. If landing cannot be made within 5 minutes, EMER GEN must be connected to avoid excessive discharge of the batteries.

- L/G ..... UP  
Select the landing gear UP to allow emergency generator operation.
- EMER ELEC PWR ..... MAN ON  
Push the EMER ELEC PWR MAN ON switch to reset the emergency generator.
- APU MASTER SW (if APU not running) ..... CHECK OFF  
Ensure APU MASTER SW is off. With the switch ON, batteries supply the DC BAT BUS for 3 minutes.
- FAC 1 ..... OFF THEN ON  
Rudder trim is recovered despite no indication being available.
- BLOWER + EXTRACT ..... OVRD  
Cooling air is provided by air conditioning system and extracted overboard through the extract valve.
- LDG ELEV ..... MAN ADJUST  
Landing elevation must be manually set due to loss of the FMGCs after landing gear extension.

**Note:** *The warning EPR MODE FAULT N1 DEGRADED MODE is triggered.*

**FLT CTL ALTN LAW**

(PROT LOST)

- MAX SPEED ..... 320 KT

**Note:** ECAM lower display is not available. Press and hold the STS button to display the STATUS page on the upper ECAM.

- MIN RAT SPD ..... 140 KT
  - MAX SPEED ..... 320 KT
  - MAX BRK PR..... 1000 PSI
- FUEL GRVTY FEED  
AVOID NEGATIVE G FACTOR

If there are discrepancies between airspeed indications on Captain's PFD and standby indicator, disregard STBY indication (probe not deiced).

APPR PROC

- FOR LDG ..... USE FLAP 3

**AT 1000 FT AGL:**

- L/G ..... DN

With the landing gear down, electrical power is supplied by batteries only. Battery endurance time is estimated at 22 minutes.

Both FACs are lost after landing gear extension; check approach speed in Landing Performance chapter or refer to V<sub>LS</sub> on the PFD.

- APPR SPD..... VREF + 10/140 KT

Approach speed must be at least minimum RAT speed (140 knots).

- LDG DIST PROC ..... APPLY

ALTN LAW : PROT LOST  
WHEN L/G DN : DIRECT LAW  
BAT ONLY  
CTR TK FUEL UNUSABLE  
SLATS/FLAPS SLOW

INOP SYS displayed on ECAM:

F/CTL PROT	SPLR 1 + 2 + 5	A/THR
REVERSER 1 + 2	ELAC 2	FUEL PUMPS
ADR 2 + 3	SEC 2 + 3	ANTISKID
IR 2 + 3	A/CALL OUT	N.W. STEER
RA 1 + 2	AP 1 + 2	

**Note:** To determine status of other systems, refer to the Emergency Generator /Battery Powered Equipment table in the Irregular Procedures chapter.

**STATUS**

Affected systems

- \*CAB PRESS
- \*HYD
- \*FUEL
- \*AIR COND
- \*BRAKES
- \*WHEEL
- \*F/CTL

INOP SYS

See below.

**15.30.8**

**Emergency Procedures  
Procedures D-E**

**A319/A320**

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**Note:** For go-around procedure, refer to ELEC ESS BUSES ON BAT irregular procedure.

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