CHECK FLIGHT CERTIFICATE

AIRBUS A319/A320/A321 with V2500 engines **CFS 275 Issue 1**

Registration:

Date:	Crew:	Observer:

Performance

	Climb #1	Climb #2	
Average Weight			
Average Altitude			ft
Average Temp.			°C
Speed			KIAS
Achieved Rate			fpm
Scheduled Rate			fpm
Margin			fpm
Permitted Margin	-80	-120	fpm

Airfield:

Start Weight Kg/Lbs*:

Takeoff cg:

Performance:

SATIS/UNSATIS/NOT APPLICABLE*

*(delete as applicable)**

Defects

No.	Defect	-/R/FT	Action?

(use a continuation sheet as necessary)

Conclusions/Comments

I CERTIFY that I have tested the above aircraft and have detailed the deficiencies and unsatisfactory features above. Those items annotated R or FT must be dealt with as shown in the notes on the reverse side.

Name:	Signed:	Date:	Licence No.:
For CAA Use only	Report Logged by:	Date:	Report No.:

General
Only CAA personnel or pilots specifically briefed to carry out CAA Check Flights may conduct the test.
General notes on test conduct can be found in the CAA Check Flight Handbook.

Registration: If the aircraft is not on the UK register, add the manufacturers serial number and expected UK registration (if known).
Crew: Captain, co-pilot, Flight engineer (where applicable).
Airfield: Departure airfield.
Start Weight: Actual all up weight at first engine start. Also delete Kg or Lbs as appropriate.
Takeoff cg: Actual cg at lift-off, preferably as a % of the Mean Aerodynamic Chord.

Performance
A full description of climb analysis is given in the CAA Check Flight Handbook.
Climb#1/Climb#2: Enter in these columns data from the first and second climbs.
Average Weight: The aircraft all up weight at the midpoint of the measured climb.
Average Altitude: The altitude at which the line drawn to average the measured points passes through at the mid time.
Average Temp: The temperature at which the line drawn to average the measured points passes through at the mid time.
Speed: The target climb speed (Indicated Airspeed.)
Achieved Rate: The climb rate as given by the slope of the line drawn to average the measured altitude points in feet per minute.
Scheduled Rate: The expected gross rate of climb read from the appropriate graph in the Flight Manual with any adjustments for configuration differences. For large aircraft, the basic gross data are normally to be found in a separate supplement labelled 'Additional Flight Test Data'.
Margin: The difference between the Scheduled and Achieved rates of climb (negative if achieved is lower than scheduled).

Defects
Enter all defects from the flight. All defects must also be entered in the Technical Log. Procedural items entered in the Technical Log (such as re-stowing oxygen masks) need not be entered here. Items affecting flight safety which were known before the flight, whether or not they were deferred should be entered. In the latter case, the defect should be annotated accordingly after the details.
No.: The first column is to allow the items to be numbered.
Defect: Enter details of the defect.
-/R/FT: Classify each defect according to its impact on safety, regardless of whether it can be deferred according to the MEL. Any deferrals should be dealt with in the normal way in the Technical Log. Items requiring rectification (or deferral under the MEL) before further flight for hire or reward or before the issue of the CofA should be marked 'R'. Additionally, items that require re-checking in-flight following rectification (such as inadequate climb performance) should be marked 'FT'. Items requiring both should be marked 'R/FT'.
Action?: This column should be left blank unless further information is required from the engineers or the item is considered to be of sufficient import that CAA action is considered necessary, then the person/department/agency from whom further action is required should be noted in this column. Annotate accordingly if an MOR or similar report is to be raised.

Conclusions/Comments
Any conclusions, notes or comments useful for tracking defects may be entered.
Name: Only the pilot who carried out the test may sign this sheet.

CAA Check Flight Schedules

All CAA Airworthiness Check Flight Schedules (CFSs) are prepared based on a design standard which, before September 2003, was the UK Type Certificate. Following the creation of EASA there may be different design standards in service within the European Union (EU) - this may include modifications approved in any EU country.

It is the responsibility of the flight crew to ensure that the exercises and limitations in the CFS are correct for the aircraft under test.

The prime source of information will be the aircraft flight manual and in the event of conflict the flight manual should be taken as overriding.

CAA policy is that pilots who conduct airtests on the behalf of the Authority must be acceptable to the Authority, must have been briefed on techniques and safety considerations before carrying out the tests in these schedules and must have carried out an airtest within the last 4 years.

The CAA does not accept responsibility for the use of a CAA CFS on a test flight not directly under their control.

CHECK FLIGHT SCHEDULE

AIRBUS A319/A320/A321 with V2500 engines **CFS 275 ISSUE 1**

Operator/Maintenance Organisation	
Aerodrome	
Altitude	Temperature

INTRODUCTION

This schedule is applicable only to Airbus A319, A320 or A321 aircraft fitted with IAE V2500 engines.

The schedule is based on the assumption that the everyday operation of the aircraft serves as a continuous check on the functioning of all normal services. On these Check Flights, however, the crew are expected generally to monitor the behaviour of all equipment and to report any unserviceable items. In addition to completing all the required tests in the schedule, any characteristics which are considered unsafe or undesirable must be recorded.

MINIMUM CREW

The minimum flight crew shall be increased by one observer to record the results of the tests. The pilot conducting the tests shall be specifically approved by the CAA(SRG) for carrying out Check Flights on Airbus A319/320/321 aircraft.

PASSENGERS

While it is legal to carry passengers on a test flight of an aircraft with a valid Certificate of Airworthiness, the practice is not recommended. If passengers are carried, however, they should be informed that the risk is greater than on an ordinary flight.

OXYGEN

Oxygen shall be available to all persons on board. All Passenger Service Unit oxygen mask covers should be latched before flight.

TEST SCHEDULE

The pilot conducting the tests must be familiar with the contents of this schedule before flight. All members of the required minimum crew must be provided with copies of the schedule for use in flight.

The data contained in this schedule is correct at the time of writing, but might not be in agreement with subsequent Flight Manual amendments or FCOM; in cases of conflict, the Flight Manual is overriding, and CAA (SRG) Flight Test Department must be informed. In particular, pilots are recommended to check the latest FCOM to confirm power settings given at figure 2. The altitude conditions in the schedule must be observed to ensure adequate safety and validity of the test results. The tests should, if possible, be carried out in the sequence as written.

LOADING

Load the aircraft to a ramp weight as shown below and a C.G. which will remain within Flight Manual Limitations at all times.

A319	50000 Kg to 56000 Kg
A320	55000 Kg to 60000 Kg
A321	60000 Kg to 75000 Kg

Record:

Zero Fuel Weight	Kg
Ramp Weight	Kg
Ramp CG	% MAC

PRE-FLIGHT INFORMATION

Record: - Total airframe hours

Record:

- Engine serial no.

Port	Starboard

Except where otherwise indicated, the flight techniques are those associated with normal operation of the aircraft (for example yaw damper engaged). Fuel symmetry must be maintained, particularly when aircraft handling is being assessed.

1. PRE-FLIGHT

1.1 Flight Deck Markings and Placards

Check for presence, accuracy and legibility of all flight deck markings and placards. Record any deficiencies. SAT/UNSAT

1.2 Emergency Generator check

Before engine start carry out the following:.

BLUE PUMP OVRD (Top overhead panel)	ON
EMER GEN TEST	Press and hold
Check on ECAM ELEC page:	
AC ESS green with SHED on and supplied by EMER GEN	SAT/UNSAT
DC ESS green with SHED on and supplied by ESS TR from EMER GEN	SAT/UNSAT
EMER GEN volts between 110 and 120	SAT/UNSAT
EMER GEN frequency between 390 and 410 hz	SAT/UNSAT
EMER GEN TEST	Release
BLUE ELEC PUMP	OFF then AUTO

1.3 Pre-flight Checks

Carry out all normal pre-flight checks, recording any abnormal items. Keep APU running.. SAT/UNSAT

2. TAKE-OFF

Carry out normal TOGA take-off. (Bump Ratings need not be used).

Record any unusual behaviour.

Select pressurisation landing elevation to 8000 ft.

3. PERFORMANCE AND ENGINE RELIGHTING

3.1 & 3.2 Performance climbs

For standard airworthiness airtests on the following variants fitted with V2500 engines, the two single engine climbs may be omitted as shown below.

A319-131 (V2522-A5)
A320-231 (V2500-A1)
A321-231 (V2533-A5)

For new or imported aircraft refer to CAA Flight Department for advice.

If climbs are required the conditions and proforma are included at the back of this schedule.

3.3 Engine Relight

Engine Shutdown

Leave the No.2 Engine at idle for 5 minutes then shut it down at any convenient speed and altitude above 8000 ft AGL

Allow 2 minutes shutdown before proceeding with a starter assist.

Relight the No.2 engine at 200 kt.

Altitude		ft		
Windmilling	N1	%	N2	%

Time to EGT rise	sec
Max EGT	°C
Time to stabilised Flight Idle	sec

Allow 5 minutes at idle after the relight.

SHUTDOWN APU

4. PRESSURISATION

Not Above FL 200

4.1 Oxygen Masks

Check all flight deck oxygen masks for satisfactory flow and microphone operation. SAT/UNSAT

4.2 Cabin Altitude Warning and Passenger Oxygen Dropout

Switch Packs 1 and 2 OFF and allow the cabin leak rate to depressurise the cabin. The depressurisation rate may be increased by using MANUAL mode, if desired, providing CABIN PRESS MODE SEL is reset to AUTO before the anticipated warning is reached. Leak rate can be increased by opening the ventilation BLOWER and EXTRACT pushbuttons to OVRD

Check and record:

- cabin altitude when EXCESS CAB ALT warning occurs

(Limits 9200 ft to 9900 ft) ft

- cabin altitude when passenger oxygen dropout occurs

(Limits 13500 ft to 14000 ft) ft

Record location of any Passenger Service Units that failed to open, including toilet and cabin attendant areas.

With LDG ELEV to AUTO and with cabin altitude reducing, climb to FL390.

4.3 Maximum Cabin Differential Pressure | FL390 |

a) AUTO mode

In level flight at FL390, with pressurisation MODE SEL and LDG ELEV set to AUTO, check and record the stabilised maximum cabin differential pressure.

(Limits 7.8 to 8.3 psi) | psi |

b) MANUAL mode Safety Valve operation.

Select MAN mode on the MODE SEL switch (LDG ELEV may remain at AUTO) and reduced cabin altitude on the MAN V/S CTL switch. Check and record the cabin differential pressure when safety valve operations occurs.

(Limits 8.2 to 9.0 psi and more than 0.1psi above pressure in auto) | psi |

CAUTION : DO NOT EXCEED 9.2 psi

Reduce cabin differential pressure to the value recorded in 4.3(a) and reset the MODE SEL to AUTO.

5. **APU RELIGHT** | FL390/ Max Relight Altitude |

Check the ability to relight the APU at M0.78 and FL390 or the maximum relight altitude if lower SAT/UNSAT

6. **HIGH MACH** FL350-FL300

Clear of cloud and turbulence and using up to maximum continuous thrust if required, accelerate in a shallow dive to M0.84. In order that M0.85 is not exceeded, do not accelerate faster than 0.5 knots per second (trend vector 5 knots length)

Check and record:

- Indicated Mach Number at onset of overspeed warning IMN
(limits: 0.82 to 0.84)

- satisfactory operation of overspeed protection. SAT/UNSAT

Speed brakes Deploy near M0.84

Confirm no abnormal roll or pitch SAT/UNSAT

(Satisfactory operation of the overspeed protection laws is indicated if full forward side stick is reached before M0.84 or if the aircraft slowly pitches up and speed reduces when the side stick is released to neutral near M0.84).

DO NOT EXCEED 0.85 IMN

7. **NO.1 ENGINE RELIGHT, ELECTRICAL FUNCTIONING**

Close No.1 thrust lever and allow No.1 engine to stabilise at idle for 5 minutes, then shut it down. Initiate a drift down at above or at the minimum relight speed, using thrust on No.2 engine to control rate of descent to around 500 ft/min.

With No.1 engine shutdown, check and record satisfactory electrical operation:

- using No.2 engine and APU generators together SAT/UNSAT

RESET No. 2 GEN

On reaching the maximum relight altitude given in the AFM and after at least 2 mins shut down, relight No.1 engine using the windmill relight procedure at the slowest windmill relight speed at this altitude (around 250 KIAS). The X BLEED valve should be SHUT and APU BLEED off.

Altitude		ft		
Windmilling	N1	%	N2	%

Time to EGT rise	sec
Max EGT	°C
Time to stabilised Flight Idle	sec

SAT/UNSAT

Leave the engine idling for at least 5 minutes before restoring power.

APU Shutdown

8. **HIGH IAS** Starting FL180

Clear of cloud and turbulence and using up to maximum continuous thrust if required, accelerate in a shallow dive to 360 KIAS or maximum speed achievable if lower. In order that 365 KIAS is not exceeded, do not accelerate faster than 0.5 knots per second (trend vector 5 knots length)

Check and record:

- IAS at onset of overspeed warning (Limits: 350 to 360 KIAS) KIAS

- satisfactory operation of overspeed protection SAT/UNSAT

Speed brakes Deploy near 360 KIAS

Confirm no abnormal roll or pitch SAT/UNSAT

(Satisfactory operation of the overspeed protection laws is indicated if full forward side stick is reached before 360 KIAS or if the aircraft pitches up and speed reduces when the side stick is slowly released to neutral near 360 KIAS).

DO NOT EXCEED 365 KIAS

9. HIGH INCIDENCE PROTECTION

Recommended FL130 Limits 10000ft AGL to FL140

These tests are to be carried out clear of cloud and turbulence with normal control laws and protection functions operating. Both engine generators must have been on line for at least 3 minutes before starting these tests.

In each required configuration the aircraft should be decelerated smoothly with idle thrust at around 1 knot/second until full back stick is achieved. No attempt should be made to maintain constant altitude; clearance should be obtained to operate in an altitude block of about 5000 ft. Once the operation of the alpha floor has been noted, it should be inhibited and the steady idle thrust deceleration resumed. Scheduled V_{MIN} speeds are given in Fig. 1. The scheduled V_{MIN} speeds are not valid above FL140.

The tests must be discontinued in the event of:

- airspeed reducing to V_{MIN} -5 knots; or
- operation of aural stall warning; or
- abnormal aircraft behaviour.

Where specified, automatic retraction of speedbrakes should also be checked.

9.1 Clean Configuration

With speedbrakes extended, commence a deceleration from not less than V_{MIN} +30 knots.

Check and record:

- Aircraft Weight _____ kg

- Alpha Floor Operation _____ kts

	Scheduled kts	Achieved kts
VMIN		

- automatic speedbrake retraction during deceleration SAT/UNSAT

- any abnormal behaviour SAT/UNSAT

On recovery, return the speedbrake lever to the retracted position.

9.2 Configuration 3, Gear up

Commence a deceleration from not less than V_{MIN} + 20 knots. After recovery, check speedbrake auto-retract when landing flap is selected.

Check and record:

- Aircraft Weight [kg]

- Alpha Floor Operation [kts]

	Scheduled kts	Achieved kts
VMIN		

- any abnormal behaviour SAT/UNSAT

Speedbrake Check: On recovery, accelerate to V_{MIN} + 30 knots, using thrust as necessary. A321 select conf 2, and on all select gear down and speedbrakes extended. Select slats/flaps to FULL.

Check and record

-automatic speedbrake retraction on flaps beyond conf 3 (A319/320), beyond conf 2 (A321) SAT/UNSAT

Return the speedbrake lever to the retracted position.

9.3 Configuration Full, Gear Down

*Note: The following checks may cause a WINDSHEAR DET FAULT messa*ge

Commence a deceleration from not less than V_{MIN} + 20 knots.

Check and record:

- Aircraft Weight [kg]

- Alpha Floor Operation [kts]

	Scheduled kts	Achieved kts
VMIN		

- any abnormal behaviour SAT/UNSAT

RESET CLEAN CONFIGURATION

10. STALL WARNING

Recommended FL150 Limits 10000ft AGL to FL180

The following tests are to be carried out clear of any cloud and turbulence. Decelerations are to be performed at idle thrust (inhibit alpha floor) at around 1 knot/second until the onset of aural stall warning. Scheduled stall warning speeds (V_{SW}) are given in Fig. 1.

The tests must be discontinued in the event of:-

- airspeed reducing to V_{SW} -5 knots; or
- abnormal aircraft behaviour.

Select
- Clean Configuration
- FAC 1 and 2 OFF

CAUTION: ALTERNATE CONTROL LAWS IN OPERATION. PROTECTION FUNCTIONS LOST

10.1 Clean Configuration

Commence a deceleration from not less than V_{SW} + 15 knots.

Check and record:

- Aircraft Weight _____ kg

	Scheduled kts	Achieved kts
Vsw		

- any abnormal behaviour

10.2 Configuration 3, Gear Up

Commence a deceleration from not less than V_{SW} + 15 knots.

- Aircraft Weight _____ kg

	Scheduled kts	Achieved kts
Vsw		

- any abnormal behaviour

10.3 Configuration 3, Gear down

CAUTION: DIRECT CONTROL LAWS IN OPERATION

Trim the aircraft manually at V_{SW} + 15 knots and commence a deceleration at about 1 kt per second.

Check and record:

- Aircraft Weight	kg
Trim Speed (Vsw+15)	KIAS

	Scheduled kts	Achieved kts
Vsw		

- any abnormal behaviour

Select - FAC 1 and 2 ON
CONFIRM normal control laws restored

11. LANDING GEAR GRAVITY EXTENSION

Clean configuration with airspeed and altitude as convenient but within gear limiting speeds. With the normal gear lever up, select gear extension on the gravity extension handle.

Confirm satisfactory gear extension. SAT/UNSAT

Select - normal gear lever down

- gravity extension handle returned to normal (wind fully anti-clockwise)

Note: The gear may be left extended in preparation for the next test.

12. **ENGINE ACCELERATIONS** Below FL 85

Conditions:
- Slats/Flaps FULL, Gear Down
- Airspeed VLS
- Air Conditioning/Pressurisation ON (Both Packs)
- All anti-ice off

On each engine in turn, close the thrust lever and allow the engine to stabilise at idle. Record the idle N1 and N2. Rapidly open the thrust lever to the TOGA position and record the acceleration time to go-around EPR.

SAT °C Altitude ft

Scheduled Go-Around EPR (Fig. 2) ECAM Go-Around EPR

Engine	No.1	No2
Idle N1		
Idle N2		
Acceleration Time		

(Limit acceleration time 12 seconds max.)

SAT/UNSAT

13. **RAT EXTENSION, EMERGENCY ELECTRICS**

Blue Hydraulic Electric pump OFF

SAT/UNSAT

With landing gear up, confirm satisfactory deployment of RAT, using RAT MAN ON switch on Hydraulic panel.

Blue system pressure between 2200 psi and 2600 psi

SAT/UNSAT

Blue Hydraulic Electric pump ON

14. **LANDING**

Carry out a normal landing.

Note any unusual characteristics.

15. POST-FLIGHT ACTIONS

15.1 Complete the statement of defects and sign the Check Flight Certificate and state whether or not the aeroplane needs to be re-flown.

15.2 Plot the results of the performance climbs and compare the measured rates of climb with the gross data scheduled in Flight Manual.

15.3 Pass the completed Check Flight schedule to the CAA.

FIG. 1A - SPEEDS - A319-100

Weight - KG	Conf 3 V2 KIAS	Clean VE/R KIAS	VMIN KIAS			V Stall Warning		
			Clean	Conf. 3 Gear Up	Conf. Full Gear Dn	Clean	Conf. 3 Gear Up	Conf. 3 Gear Dn
56000	127	200	152	108	104	174	117	119
55000	126	197	151	107	103	173	116	118
54000	125	195	149	105	102	172	115	117
53000	123	192	148	105	101	171	114	116
52000	122	190	146	103	100	168	112	114
51000	121	188	145	102	99	166	111	113
50000	120	186	143	101	98	165	110	112
49000	118	184	142	100	97	163	109	111
48000	117	181	140	99	96	161	109	111
47000	116	179	139	98	95	159	108	110
46000	115	177	137	97	94	158	106	108
45000	113	175	135	96	93	156	105	107
44000	112	173	134	95	92	155	103	105

VMIN Speed Tolerances: ± 4 kt

Stall Warning Tolerances: ± 5 kt

FIG. 1A A319

FIG. 1B - SPEEDS A320

Weight - KG	Conf 3 V2 KIAS	Clean VE/R KIAS	VMIN KIAS			V Stall Warning	
			Clean	Conf. 3 Gear Up	Conf. Full Gear Dn	Clean	Conf. 3
62000	135	209	160	116	114	186	122
61000	134	207	158	115	113	184	121
60000	134	204	157	114	112	182	120
59000	133	201	156	113	112	181	119
58000	132	199	155	112	111	179	118
57000	131	197	153	111	110	178	117
56000	129	194	152	110	109	176	116
55000	128	191	151	109	108	174	115
54000	127	189	149	108	107	173	114
53000	126	187	147	107	106	171	113
52000	124	185	146	106	105	170	112
51000	123	183	144	105	104	168	110
50000	122	181	143	104	103	166	109
49000	120	180	141	103	102	165	108

VMIN Speed Tolerances: ± 4 kt

Stall Warning Tolerances: ± 5 kt

FIG. 1B A320

FIG. 1C - SPEEDS - A321

Weight - KG	Conf 3 V2 KIAS	Clean VE/R KIAS	VMIN KIAS			V Stall Warning	
			Clean	Conf. 3 Gear Up	Conf. Full Gear Dn	Clean	Conf. 3
80	146	243	187	123	122	195	126
78	144	239	184	121	120	193	124
76	143	235	181	120	119	190	123
74	141	230	178	118	117	188	121
72	139	226	175	117	116	186	119
70	137	222	172	115	114	183	118
68	135	217	169	113	112	180	116
66	133	212	166	112	111	177	114
64	132	207	163	110	109	174	112
62	129	202	161	109	108	171	110
60	127	196	158	107	106	168	107
58	123	192	155	105	104	165	105
56	121	188	152	104	103	162	103
54	118	185	149	102	101	159	102
52	116	182	146	100	99	156	100

VMIN Speed Tolerances: ± 4 kt

Stall Warning Tolerances: ± 5 kt

FIG. 1C A321

GO AROUND

V2500–A1 | GO AROUND EPR | AIR COND ON | MACH=.225

EPR CORRECTIONS FOR AIR BLEED	TAT<10 (°C)	TAT≥10 (°C)
AIR CONDITIONING OFF	.010	.010
ENGINE ANTI ICE ON	0.000	–.017
ENGINE ANTI ICE AND WING ANTI ICE ON	–.007	–.024

TAT (°C)	PRESSURE ALTITUDE (FT) -1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.
-60.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.477	1.482
-40.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.477	1.482
-20.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.477	1.482
-10.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.477	1.482
0.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.477	1.482
10.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.477	1.482
12.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.477	1.482
14.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.477	1.482
16.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.477	1.482
18.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.467	1.472	1.472
20.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.457	1.462	1.462	1.461
22.0	1.355	1.372	1.387	1.402	1.417	1.432	1.448	1.453	1.452	1.451	1.451
24.0	1.355	1.372	1.387	1.402	1.417	1.432	1.443	1.442	1.442	1.441	1.441
26.0	1.355	1.372	1.387	1.402	1.417	1.428	1.433	1.433	1.432	1.431	1.431
28.0	1.355	1.372	1.387	1.402	1.413	1.418	1.423	1.423	1.422	1.422	1.421
30.0	1.355	1.372	1.387	1.398	1.403	1.409	1.414	1.413	1.413	1.412	1.412
32.0	1.355	1.372	1.383	1.389	1.394	1.399	1.404	1.404	1.403	1.403	1.402
34.0	1.355	1.368	1.374	1.380	1.385	1.390	1.395	1.394	1.394	1.393	1.393
36.0	1.355	1.360	1.365	1.371	1.376	1.381	1.386	1.385	1.385	1.384	1.384
38.0	1.351	1.351	1.357	1.362	1.367	1.372	1.377	1.376	1.375	1.375	1.375
40.0	1.343	1.343	1.348	1.353	1.358	1.363	1.368	1.367	1.367	1.366	1.366
42.0	1.335	1.335	1.340	1.345	1.350	1.354	1.359	1.358	1.358	1.357	
44.0	1.327	1.327	1.332	1.337	1.341	1.346	1.350	1.350	1.349		
46.0	1.319	1.319	1.324	1.328	1.333	1.338	1.342	1.342			
48.0	1.311	1.311	1.316	1.320	1.325	1.330	1.334				
50.0	1.303	1.303	1.308	1.313	1.317	1.322					
52.0	1.296	1.296	1.301	1.305	1.310						
54.0	1.289	1.289	1.293	1.298							
56.0	1.282	1.282	1.286								
58.0	1.275	1.275									
60.0	1.269										
62.0											

To account for speed differences, increase EPR by .010 for the check at item 3.2

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

MAXIMUM CONTINUOUS

V2500–A1 | MAXIMUM CONTINUOUS EPR | AIR COND ON * | IAS=230 KT

EPR CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	.017
ENGINE ANTI ICE ON	–.017
ENGINE ANTI ICE AND WING ANTI ICE ON	–.037

TAT (°C)	PRESSURE ALTITUDE (FT) –1000.	3000.	7000.	11000.	15000.	19000.	23000.	27000.	31000.	35000.	39000.
–54.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.509	1.494
–50.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.509	1.494
–46.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.509	1.494
–42.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.509	1.494
–38.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.509	1.494
–34.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.509	1.494
–30.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.509	1.494
–26.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.509	1.494
–22.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.505	1.494
–18.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.493	1.485	1.477
–14.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.469	1.473	1.463	1.454
–10.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.457	1.449	1.440	1.430
–6.0	1.278	1.311	1.364	1.426	1.470	1.464	1.439	1.433	1.424	1.416	1.406
–2.0	1.278	1.311	1.364	1.426	1.470	1.464	1.414	1.407	1.399	1.394	1.383
2.0	1.278	1.311	1.364	1.426	1.470	1.454	1.389	1.381	1.376	1.372	1.360
6.0	1.278	1.311	1.364	1.426	1.470	1.430	1.364	1.357	1.353	1.349	1.338
10.0	1.278	1.311	1.364	1.426	1.449	1.406	1.339	1.335	1.330	1.327	1.315
14.0	1.278	1.311	1.364	1.422	1.425	1.382	1.318	1.312	1.308		
18.0	1.278	1.311	1.364	1.401	1.402	1.359	1.296	1.291			
22.0	1.278	1.311	1.357	1.381	1.378	1.337	1.276				
26.0	1.278	1.311	1.344	1.361	1.357	1.316					
30.0	1.278	1.301	1.331	1.342	1.336	1.295					
34.0	1.278	1.289	1.320	1.323	1.317						
38.0	1.264	1.278	1.305	1.305							
42.0	1.251	1.268	1.288	1.287							
46.0	1.239	1.253	1.273								
50.0	1.228	1.239	1.258								
54.0	1.215	1.226									

* One engine inoperative – 1 pack operative on remaining engine.

To account for speed differences, increase EPR by .010 for the check at item 3.2

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

V2500-A1

Figure 2A

GO AROUND

V2522-A5	GO AROUND EPR	AIR COND ON	MACH=.225
CORRECTIONS FOR AIR BLEED			
AIR CONDITIONING OFF	ADD .007 TO EPR		
ENGINE ANTI ICE ON	READ AT ACTUAL TAT +5 (°C)		
ENGINE ANTI ICE AND WING ANTI ICE ON	READ AT ACTUAL TAT +5 (°C) AND SUBTRACT .006 FROM EPR		

TAT (°C)	PRESSURE ALTITUDE (FT) -2000.	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.
-60.0	1.299	1.315	1.331	1.342	1.352	1.366	1.379	1.393	1.402	1.412
0.0	1.299	1.315	1.331	1.342	1.352	1.366	1.379	1.393	1.402	1.412
40.0	1.299	1.315	1.331	1.342	1.352	1.366	1.379	1.393	1.402	1.412
42.0	1.299	1.315	1.331	1.342	1.352	1.366	1.379	1.393	1.402	1.412
44.0	1.299	1.315	1.331	1.342	1.352	1.366	1.379	1.393	1.402	1.412
46.0	1.299	1.315	1.331	1.342	1.352	1.366	1.379	1.393	1.402	
48.0	1.299	1.315	1.331	1.342	1.352	1.366	1.379	1.393		
50.0	1.299	1.315	1.331	1.342	1.352	1.366	1.379			
52.0	1.299	1.315	1.331	1.342	1.352	1.366				
54.0	1.299	1.315	1.331	1.342	1.352					
56.0	1.299	1.315	1.331	1.342						
58.0	1.299	1.315	1.331							
60.0	1.299	1.315								
62.0	1.299									

TAT (°C)	PRESSURE ALTITUDE (FT) 6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.
-60.0	1.402	1.412	1.422	1.435	1.450	1.465	1.479	1.497
0.0	1.402	1.412	1.422	1.435	1.450	1.465	1.479	1.497
19.0	1.402	1.412	1.422	1.435	1.450	1.465	1.479	1.497
20.0	1.402	1.412	1.422	1.435	1.450	1.465	1.479	1.497
22.0	1.402	1.412	1.422	1.435	1.450	1.465	1.479	1.497
24.0	1.402	1.412	1.422	1.435	1.450	1.465	1.479	1.491
26.0	1.402	1.412	1.422	1.435	1.450	1.465	1.479	1.485
28.0	1.402	1.412	1.422	1.435	1.450	1.465	1.475	1.478
30.0	1.402	1.412	1.422	1.435	1.450	1.465	1.470	1.471
32.0	1.402	1.412	1.422	1.435	1.450	1.460	1.463	1.463
34.0	1.402	1.412	1.422	1.435	1.450	1.454	1.456	
36.0	1.402	1.412	1.422	1.435	1.445	1.448		
38.0	1.402	1.412	1.422	1.435	1.440			
40.0	1.402	1.412	1.422	1.431				
42.0	1.402	1.412	1.422					
44.0	1.402	1.412						
46.0	1.402							

V2522-A5

To account for speed differences, increase EPR by .010 for the check at item 3.2

MAXIMUM CONTINUOUS

V2522/24	MAXIMUM CONTINUOUS EPR	AIR COND ON *	IAS=230 KT
CORRECTIONS FOR AIR BLEED			
AIR CONDITIONING OFF	.017		
ENGINE ANTI ICE ON	-.017		
ENGINE ANTI ICE AND WING ANTI ICE ON	-.037		

TAT (°C)	PRESSURE ALTITUDE (FT) 0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
-60.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.454	1.492	1.505	1.494
-23.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.454	1.492	1.505	1.494
-21.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.454	1.492	1.497	1.493
-20.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.454	1.492	1.492	1.488
-19.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.454	1.492	1.487	1.482
-18.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.454	1.492	1.482	1.477
-16.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.454	1.483	1.472	1.466
-9.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.453	1.442	1.434	1.427
-8.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.447	1.437	1.427	1.420
-2.0	1.265	1.284	1.313	1.343	1.426	1.485	1.453	1.410	1.397	1.393	1.385
1.0	1.265	1.284	1.313	1.343	1.426	1.485	1.439	1.391	1.380	1.376	1.368
3.0	1.265	1.284	1.313	1.343	1.426	1.485	1.427	1.378	1.369	1.365	1.356
5.0	1.265	1.284	1.313	1.343	1.426	1.475	1.415	1.365	1.358	1.353	1.345
7.0	1.265	1.284	1.313	1.343	1.426	1.463	1.403	1.352	1.347	1.342	1.334
9.0	1.265	1.284	1.313	1.343	1.426	1.452	1.392	1.342	1.336	1.331	1.323
11.0	1.265	1.284	1.313	1.343	1.426	1.440	1.379	1.331	1.325		1.311
12.0	1.265	1.284	1.313	1.343	1.424	1.434	1.373	1.326	1.319		1.306
16.0	1.265	1.284	1.313	1.343	1.405	1.410	1.350	1.304			
18.0	1.265	1.284	1.313	1.343	1.396	1.398	1.339	1.293			
19.0	1.265	1.284	1.313	1.339	1.391	1.392	1.334	1.288			
20.0	1.265	1.284	1.313	1.334	1.387	1.387	1.329	1.283			
23.0	1.265	1.284	1.313	1.319	1.372	1.372	1.312				
25.0	1.265	1.284	1.306	1.310	1.361	1.361	1.302				
29.0	1.265	1.283	1.288	1.291	1.341	1.340	1.280				
30.0	1.265	1.278	1.283	1.288	1.336	1.335	1.275				
32.0	1.265	1.270	1.274	1.283	1.327	1.325					
34.0	1.257	1.261	1.265	1.277	1.318	1.314					
35.0	1.253	1.257	1.260	1.274	1.314						
40.0	1.238	1.239	1.248	1.257	1.291						
45.0	1.224	1.226	1.235	1.241							
50.0	1.211	1.213	1.222								
55.0	1.198	1.199									
60.0	1.185										
64.0											

To account for speed differences, increase EPR by .010 for the check at item 3.2

* One engine Inoperative – 1 pack operative on remaining engine.

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

Figure 2B

V2522-A5

GO AROUND

V2527-A5 GO-AROUND EPR AIR COND ON MACH=.225

CORRECTIONS FOR AIR BLEED

AIR CONDITIONING OFF	ADD .010 TO EPR
ENGINE ANTI ICE ON	READ AT TAT +5.(°C)
ENGINE ANTI ICE AND WING ANTI ICE ON	READ AT TAT +5.(°C) AND SUBTRACT .007 FROM EPR

TAT (°C)	PRESSURE ALTITUDE (FT) -1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.
-60.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
-40.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
-20.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
0.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
10.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
20.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
22.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
24.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
26.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
28.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.502	1.500
30.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.492	1.492	1.491
32.0	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.482	1.482	1.482	1.480
34.0	1.391	1.411	1.428	1.446	1.457	1.466	1.471	1.472	1.472	1.471	1.470
36.0	1.391	1.411	1.428	1.446	1.457	1.466	1.462	1.463	1.462	1.460	1.459
38.0	1.391	1.411	1.428	1.446	1.457	1.458	1.453	1.452	1.451	1.450	1.448
40.0	1.391	1.411	1.428	1.446	1.455	1.449	1.443	1.442	1.440	1.439	1.438
42.0	1.391	1.411	1.428	1.446	1.444	1.438	1.433	1.431	1.430	1.429	
44.0	1.391	1.411	1.428	1.439	1.433	1.427	1.422	1.421	1.420		
46.0	1.391	1.411	1.428	1.428	1.422	1.416	1.411	1.410			
48.0	1.391	1.411	1.417	1.416	1.411	1.406	1.401				
50.0	1.391	1.407	1.406	1.405	1.400	1.395					
52.0	1.391	1.396	1.396	1.395	1.390						
54.0	1.388	1.386	1.386	1.385							
56.0	1.377	1.377	1.376								
58.0	1.368	1.367									
60.0	1.359										

To account for speed differences, increase EPR by .010 for the check at item 3.2

(Note: Data was correct at the time of publication
- the latest FCOM should be consulted for definitive data)

MAXIMUM CONTINUOUS

V2527 MAXIMUM CONTINUOUS EPR AIR COND ON * IAS=230 KT

CORRECTIONS FOR AIR BLEED

AIR CONDITIONING OFF	.017
ENGINE ANTI ICE ON	-.017
ENGINE ANTI ICE AND WING ANTI ICE ON	-.037

TAT (°C)	PRESSURE ALTITUDE (FT) 0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
-50.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-46.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-42.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-38.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-34.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-30.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-26.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-22.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.502	1.494
-18.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.482	1.477
-14.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.471	1.462	1.455
-10.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.448	1.440	1.433
-6.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.435	1.424	1.415	1.408
-2.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.410	1.397	1.393	1.385
2.0	1.285	1.298	1.335	1.379	1.442	1.485	1.433	1.384	1.375	1.370	1.362
6.0	1.285	1.298	1.335	1.379	1.442	1.469	1.409	1.359	1.352	1.348	1.340
10.0	1.285	1.298	1.335	1.379	1.442	1.446	1.385	1.336	1.330	1.325	1.317
14.0	1.285	1.298	1.335	1.379	1.428	1.422	1.361	1.315	1.308		
18.0	1.285	1.298	1.335	1.379	1.405	1.398	1.339	1.293			
22.0	1.285	1.298	1.335	1.366	1.382	1.377	1.318	1.272			
26.0	1.285	1.298	1.327	1.352	1.360	1.356	1.296				
30.0	1.285	1.294	1.316	1.338	1.341	1.335	1.275				
34.0	1.279	1.282	1.305	1.327	1.322	1.314					
38.0	1.265	1.269	1.296	1.310	1.304						
42.0	1.251	1.259	1.282	1.294	1.285						
46.0	1.239	1.247	1.268	1.278							
50.0	1.228	1.234	1.253								
54.0	1.215	1.221	1.238								
58.0	1.203	1.208									
62.0	1.190										
66.0											

* One engine inoperative – 1 pack operative on remaining engine.

To account for speed differences, increase EPR by .010 for the check at item 3.2

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

Figure 2C

V2527-A5

GO AROUND

V2527E-A5	GO-AROUND EPR	AIR COND ON	MACH=.225
CORRECTIONS FOR AIR BLEED			
AIR CONDITIONING OFF		ADD .010 TO EPR	
ENGINE ANTI ICE ON		READ AT TAT +5.(°C)	
ENGINE ANTI ICE AND WING ANTI ICE ON		READ AT TAT +5.(°C) AND SUBTRACT .007 FROM EPR	

TAT (°C)	PRESSURE ALTITUDE (FT)										
	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.
-60.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.553	1.561	1.570	1.569
-40.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.553	1.561	1.570	1.569
-20.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.553	1.561	1.570	1.569
0.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.553	1.561	1.570	1.569
10.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.553	1.561	1.570	1.569
16.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.553	1.561	1.570	1.569
18.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.553	1.561	1.565	1.562
20.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.553	1.556	1.553	1.551
22.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.548	1.545	1.541	1.540
24.0	1.391	1.411	1.431	1.454	1.476	1.503	1.531	1.537	1.533	1.530	1.529
26.0	1.391	1.411	1.431	1.454	1.476	1.503	1.527	1.526	1.522	1.519	1.518
28.0	1.391	1.411	1.431	1.454	1.476	1.503	1.518	1.515	1.511	1.509	1.508
30.0	1.391	1.411	1.431	1.454	1.476	1.503	1.507	1.503	1.500	1.497	1.497
32.0	1.391	1.411	1.431	1.454	1.476	1.494	1.495	1.492	1.489	1.486	1.485
34.0	1.391	1.411	1.431	1.454	1.476	1.484	1.483	1.480	1.477	1.475	1.474
36.0	1.391	1.411	1.431	1.454	1.473	1.474	1.471	1.468	1.466	1.463	1.462
38.0	1.391	1.411	1.431	1.454	1.464	1.463	1.460	1.457	1.454	1.452	1.451
40.0	1.391	1.411	1.431	1.454	1.456	1.453	1.449	1.446	1.443	1.441	1.441
42.0	1.391	1.411	1.431	1.448	1.447	1.442	1.438	1.435	1.432	1.430	
44.0	1.391	1.411	1.431	1.440	1.436	1.431	1.426	1.423	1.421		
46.0	1.391	1.411	1.428	1.429	1.424	1.420	1.415	1.412			
48.0	1.391	1.411	1.418	1.418	1.413	1.409	1.403				
50.0	1.391	1.407	1.407	1.407	1.403	1.398					
52.0	1.391	1.396	1.397	1.396	1.392						
54.0	1.388	1.386	1.387	1.386							
56.0	1.377	1.377	1.377								
58.0	1.368	1.367									
60.0	1.359										

To account for speed differences, increase EPR by .010 for the check at item 3.2

V2527E-A5

(Note: Data was correct at the time of publication
- the latest FCOM should be consulted for definitive data)

MAXIMUM CONTINUOUS

V2527	MAXIMUM CONTINUOUS EPR	AIR COND ON *	IAS=230 KT
CORRECTIONS FOR AIR BLEED			
AIR CONDITIONING OFF			.017
ENGINE ANTI ICE ON			-.017
ENGINE ANTI ICE AND WING ANTI ICE ON			-.037

TAT (°C)	PRESSURE ALTITUDE (FT)										
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
-50.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-46.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-42.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-38.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-34.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-30.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-26.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.505	1.494
-22.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.502	1.494
-18.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.492	1.482	1.477
-14.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.471	1.462	1.455
-10.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.454	1.448	1.440	1.433
-6.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.435	1.424	1.415	1.408
-2.0	1.285	1.298	1.335	1.379	1.442	1.485	1.453	1.410	1.397	1.393	1.385
2.0	1.285	1.298	1.335	1.379	1.442	1.485	1.433	1.384	1.375	1.370	1.362
6.0	1.285	1.298	1.335	1.379	1.442	1.469	1.409	1.359	1.352	1.348	1.340
10.0	1.285	1.298	1.335	1.379	1.442	1.446	1.385	1.336	1.330	1.325	1.317
14.0	1.285	1.298	1.335	1.379	1.428	1.422	1.361	1.315	1.308		
18.0	1.285	1.298	1.335	1.379	1.405	1.398	1.339	1.293			
22.0	1.285	1.298	1.335	1.366	1.382	1.377	1.318	1.272			
26.0	1.285	1.298	1.327	1.352	1.360	1.356	1.296				
30.0	1.285	1.294	1.316	1.338	1.341	1.335	1.275				
34.0	1.279	1.282	1.305	1.327	1.322	1.314					
38.0	1.265	1.269	1.296	1.310	1.304						
42.0	1.251	1.259	1.282	1.294	1.285						
46.0	1.239	1.247	1.268	1.278							
50.0	1.228	1.234	1.253								
54.0	1.215	1.221	1.238								
58.0	1.203	1.208									
62.0	1.190										
66.0											

* One engine inoperative – 1 pack operative on remaining engine.

To account for speed differences, increase EPR by .010 for the check at item 3.2

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

Figure 2D

V2527E-A5

GO AROUND

R

V2530-A5	GO-AROUND EPR	AIR COND ON	MACH=.225
CORRECTIONS FOR AIR BLEED			
AIR CONDITIONING OFF		ADD .013 TO EPR	
ENGINE ANTI ICE ON		READ AT TAT +5.(°C)	
ENGINE ANTI ICE AND WING ANTI ICE ON		READ AT TAT +5.(°C) AND SUBTRACT .008 FROM EPR	

TAT (°C)	PRESSURE ALTITUDE (FT)										
	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.
-60.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.635	1.633
-40.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.635	1.633
-20.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.635	1.633
-10.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.635	1.633
0.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.635	1.633
10.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.635	1.633
12.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.635	1.633
14.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.635	1.633
16.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.635	1.633
18.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.625	1.628	1.625
20.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.614	1.618	1.613	1.610
22.0	1.526	1.556	1.566	1.577	1.586	1.595	1.604	1.608	1.604	1.598	1.596
24.0	1.526	1.556	1.566	1.577	1.586	1.595	1.598	1.594	1.589	1.585	1.584
26.0	1.526	1.556	1.566	1.577	1.586	1.589	1.585	1.581	1.576	1.572	1.571
28.0	1.526	1.556	1.566	1.577	1.580	1.576	1.572	1.567	1.563	1.559	1.558
30.0	1.526	1.556	1.566	1.571	1.567	1.563	1.559	1.554	1.550	1.547	1.546
32.0	1.526	1.556	1.561	1.558	1.554	1.550	1.545	1.541	1.537	1.534	1.533
34.0	1.526	1.550	1.548	1.546	1.541	1.537	1.532	1.528	1.524	1.520	1.519
36.0	1.526	1.538	1.536	1.533	1.528	1.523	1.518	1.514	1.511	1.507	1.506
38.0	1.521	1.526	1.523	1.520	1.515	1.510	1.505	1.501	1.498	1.494	1.494
40.0	1.510	1.513	1.510	1.507	1.502	1.497	1.492	1.489	1.485	1.482	1.481
42.0	1.498	1.500	1.498	1.495	1.489	1.484	1.479	1.476	1.472	1.469	
44.0	1.486	1.488	1.485	1.482	1.477	1.472	1.467	1.463	1.459		
46.0	1.474	1.475	1.472	1.469	1.464	1.459	1.453	1.450			
48.0	1.462	1.462	1.459	1.456	1.451	1.446	1.440				
50.0	1.450	1.449	1.446	1.444	1.439	1.433					
52.0	1.436	1.436	1.433	1.432	1.426						
54.0	1.422	1.423	1.422	1.420							
56.0	1.408	1.412	1.410								
58.0	1.396	1.400									
60.0	1.383										

To account for speed differences, increase EPR by .010 for the check at item 3.2

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

Figure 2E

V2530-A5

MAXIMUM CONTINUOUS

V2530-A5	MAXIMUM CONTINUOUS EPR	AIR COND ON *	IAS=230 KT
CORRECTIONS FOR AIR BLEED			
AIR CONDITIONING OFF			.020
ENGINE ANTI ICE ON			-.024
ENGINE ANTI ICE AND WING ANTI ICE ON			-.046

TAT (°C)	PRESSURE ALTITUDE (FT)										
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
-50.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.625	1.617
-46.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.625	1.617
-42.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.625	1.617
-38.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.625	1.617
-34.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.625	1.617
-30.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.625	1.617
-26.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.625	1.617
-22.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.625	1.617
-18.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.607	1.597
-14.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.590	1.582	1.572
-10.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.566	1.557	1.547
-6.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.547	1.543	1.534	1.523
-2.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.524	1.518	1.510	1.500
2.0	1.409	1.433	1.470	1.498	1.535	1.575	1.569	1.500	1.494	1.484	1.475
6.0	1.409	1.433	1.470	1.498	1.535	1.557	1.548	1.475	1.468	1.458	1.448
10.0	1.409	1.433	1.470	1.498	1.535	1.532	1.526	1.450	1.441	1.433	1.420
14.0	1.409	1.433	1.470	1.498	1.518	1.506	1.503	1.424	1.415		
18.0	1.409	1.433	1.470	1.498	1.491	1.481	1.480	1.397			
22.0	1.409	1.433	1.470	1.473	1.464	1.456	1.455	1.369			
26.0	1.409	1.433	1.453	1.446	1.438	1.430	1.429				
30.0	1.409	1.425	1.426	1.420	1.411	1.404	1.403				
34.0	1.398	1.399	1.399	1.394	1.385	1.378					
38.0	1.373	1.373	1.375	1.368	1.360						
42.0	1.348	1.349	1.351	1.344	1.334						
46.0	1.324	1.325	1.327	1.320							
50.0	1.300	1.301	1.304								
54.0	1.277	1.280	1.281								
58.0	1.257	1.259									
62.0	1.236										
66.0											

* One engine inoperative – 1 pack operative on remaining engine.

To account for speed differences, increase EPR by .010 for the check at item 3.2

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

GO AROUND

V2533-A5 — GO AROUND EPR — AIR COND ON — MACH=.225

CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	ADD .013 TO EPR
ENGINE ANTI ICE ON	READ AT ACTUAL TAT +5. (°C)
ENGINE ANTI ICE AND WING ANTI ICE ON	READ AT ACTUAL TAT +5. (°C) AND SUBTRACT .008 FROM EPR

TAT (°C)	PRESSURE ALTITUDE (FT)										
	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.
-60.0	1.575	1.606	1.622	1.634	1.637	1.640	1.643	1.643	1.642	1.641	1.640
0.0	1.575	1.606	1.622	1.634	1.637	1.640	1.643	1.643	1.642	1.641	1.640
10.0	1.575	1.606	1.622	1.634	1.637	1.640	1.643	1.643	1.642	1.641	1.640
18.0	1.575	1.606	1.622	1.634	1.637	1.640	1.643	1.643	1.642	1.641	1.640
19.0	1.575	1.606	1.622	1.634	1.637	1.640	1.643	1.643	1.642	1.640	1.640
20.0	1.575	1.606	1.622	1.634	1.637	1.640	1.643	1.643	1.641	1.640	1.639
21.0	1.575	1.606	1.622	1.634	1.637	1.640	1.643	1.643	1.640	1.640	1.639
22.0	1.575	1.606	1.622	1.634	1.637	1.640	1.643	1.641	1.639	1.640	1.638
23.0	1.575	1.606	1.622	1.634	1.637	1.640	1.643	1.639	1.638	1.638	1.637
24.0	1.575	1.606	1.622	1.634	1.637	1.640	1.640	1.638	1.637	1.637	1.636
25.0	1.575	1.606	1.622	1.634	1.637	1.640	1.637	1.636	1.634	1.636	1.635
26.0	1.575	1.606	1.622	1.634	1.637	1.636	1.635	1.634	1.632	1.635	1.634
27.0	1.575	1.606	1.622	1.634	1.637	1.632	1.632	1.630	1.629	1.634	1.633
28.0	1.575	1.606	1.622	1.634	1.632	1.627	1.629	1.627	1.627	1.632	1.627
29.0	1.575	1.606	1.622	1.634	1.626	1.623	1.624	1.623	1.624	1.627	1.622
30.0	1.575	1.606	1.622	1.628	1.620	1.619	1.619	1.619	1.622	1.621	1.617
31.0	1.575	1.606	1.622	1.620	1.614	1.613	1.614	1.615	1.615	1.615	1.611
32.0	1.575	1.606	1.616	1.613	1.609	1.608	1.609	1.611	1.609	1.609	1.605
33.0	1.575	1.606	1.609	1.606	1.602	1.602	1.605	1.604	1.602	1.602	1.598
34.0	1.575	1.600	1.602	1.598	1.596	1.597	1.600	1.597	1.596	1.595	1.591
35.0	1.575	1.593	1.594	1.591	1.590	1.591	1.592	1.590	1.589	1.588	1.584
36.0	1.575	1.586	1.587	1.584	1.583	1.586	1.584	1.582	1.582	1.580	1.578
38.0	1.569	1.572	1.573	1.570	1.571	1.571	1.569	1.568	1.567	1.566	1.564
40.0	1.553	1.558	1.559	1.556	1.556	1.556	1.555	1.554	1.553	1.552	1.551
42.0	1.540	1.544	1.545	1.542	1.542	1.542	1.541	1.539	1.538	1.537	
44.0	1.527	1.531	1.532	1.528	1.528	1.527	1.526	1.525	1.524		
46.0	1.514	1.517	1.518	1.514	1.514	1.513	1.511	1.510			
48.0	1.501	1.503	1.503	1.500	1.500	1.498	1.496				
50.0	1.489	1.489	1.489	1.486	1.485	1.483					
52.0	1.473	1.474	1.474	1.472	1.471						
54.0	1.457	1.460	1.461	1.459							
56.0	1.442	1.446	1.447								
58.0	1.428	1.433									
60.0	1.414										
62.0											

To account for speed differences, increase EPR by .010 for the check at item 3.2

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

MAXIMUM CONTINUOUS

V2533-A5 — MAXIMUM CONTINUOUS EPR — AIR COND ON * — IAS=230 KT

CORRECTIONS FOR AIR BLEED	
AIR CONDITIONING OFF	.020
NACELLE ANTI ICE ON	-.024
NACELLE ANTI ICE AND WING ANTI ICE ON	-.046

TAT (°C)	PRESSURE ALTITUDE (FT)										
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.
-50.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.629	1.617
-46.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.629	1.617
-42.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.629	1.617
-38.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.629	1.617
-34.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.629	1.617
-30.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.629	1.617
-26.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.629	1.617
-22.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.629	1.617
-18.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.611	1.607	1.597
-14.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.590	1.582	1.572
-10.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.565	1.566	1.557	1.547
-6.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.547	1.543	1.534	1.523
-2.0	1.409	1.433	1.470	1.498	1.535	1.575	1.587	1.524	1.518	1.510	1.500
2.0	1.409	1.433	1.470	1.498	1.535	1.575	1.569	1.500	1.494	1.484	1.475
6.0	1.409	1.433	1.470	1.498	1.535	1.557	1.548	1.475	1.468	1.458	1.448
10.0	1.409	1.433	1.470	1.498	1.535	1.532	1.526	1.450	1.441	1.433	1.420
14.0	1.409	1.433	1.470	1.498	1.518	1.506	1.503	1.424	1.415		
18.0	1.409	1.433	1.470	1.498	1.491	1.481	1.480	1.397			
22.0	1.409	1.433	1.470	1.473	1.464	1.456	1.455	1.369			
26.0	1.409	1.433	1.453	1.446	1.438	1.430	1.429				
30.0	1.409	1.425	1.426	1.420	1.411	1.404	1.403				
34.0	1.398	1.399	1.399	1.394	1.385	1.378					
38.0	1.373	1.373	1.375	1.368	1.360						
42.0	1.348	1.349	1.351	1.344	1.334						
46.0	1.324	1.325	1.327	1.320							
50.0	1.300	1.301	1.304								
54.0	1.277	1.280	1.281								
58.0	1.257	1.259									
62.0	1.236										
66.0											

* One engine inoperative – 1 pack operative on remaining engine.

To account for speed differences, increase EPR by .010 for the check at item 3.2

(Note: Data was correct at the time of publication - the latest FCOM should be consulted for definitive data)

Figure 2F

V2533-A5

3.1 Second Segment Climb

Start Altitude not above FL60

Carry out a second segment climb on a constant heading clear of cloud and turbulence, recording data for 5 minutes. Recording shall not commence until the aircraft is stabilised at the test conditions with the ß target command satisfied and the rudder force trimmed out as far as possible.

Configuration	Slat/Flap	Configuration 3
	Gear	UP
	No.1 Engine	Idle
	No.2 Engine	TOGA
	APU Bleed	ON
	Airframe/Engine Anti-icing	OFF
	Air Conditioning/Pressurisation	One Air Cond. Pack only (from APU)
	Captains Altimeter	Set to 1013 mb
	V2 for Weight from fig 1	kts

Record: Scheduled TOGA EPR from Fig. 2 and ECAM TOGA EPR when TOGA is first selected. (Max. difference ± 0.015 EPR)

Altitude FT	SAT °C	IAS - KTS	ECAM TOGA EPR	Sched TOGA EPR

SAT/UNSAT

Second Segment Climb

Start Altitude not above FL60

START WEIGHT kg

V2 kts

TIME MINS	ALTITUDE - FT	IAS - KTS	SAT °C	EPR
0				
0.5				
1.0				
1.5				
2.0				
2.5				
3.0				
3.5				
4.0				
4.5				
5.0				

RUDDER TRIM

NO. 2 ENGINE DATA AT 3 MINUTES

EPR

N1 %

EGT °C

FUEL FLOW kg/hr

FINISH WEIGHT kg

MEAN WEIGHT kg

3.2 Engine Out En-route Climb

Starting Altitude FL80-FL150

CAUTION: DO NOT OPERATE BELOW 8000 FT AGL WITH ONE ENGINE SHUTDOWN

Ensure APU is running prior to this test.

Leave the appropriate engine idling for at least 5 minutes before performing the pre-cautionary shut-down drill.

Carry out an engine out en-route climb for 5 minutes, on a constant heading, clear of cloud and significant turbulence. Recording shall not commence until the aircraft is stabilised at the test conditions with the rudder force trimmed out.

Configuration	Flaps	UP
	Gear	UP
	No.1 Engine	MCT
	No.2 Engine	Shutdown
	APU	Running
	No.1 Bleed	On
	APU Bleed	Off
	Air Conditioning	No. 1 Pack On
	Airframe/Engine Anti-icing	OFF
	Captains Altimeter	Set to 1013 mb

En-route climb speed for Weight from Fig. 1 _____ kts

Note: The en-route climb speeds given in Figs. 1 are based on a fixed factor of stall speed and will not necessarily equal green dot speed in the test conditions.

Record: Scheduled MCT EPR from Fig. 2 and ECAM MCT EPR when MCT is first selected. (Max. difference ± 0.015 EPR)

Altitude FT	SAT °C	IAS - KTS	ECAM MCT EPR	Sched MCT EPR

SAT/UNSAT

Engine Out En-route Climb

Starting Altitude FL80-FL150

START WEIGHT kg

Ver kts

TIME MINS	ALTITUDE - FT	IAS - KTS	SAT °C	EPR
0				
0.5				
1.0				
1.5				
2.0				
2.5				
3.0				
3.5				
4.0				
4.5				
5.0				

RUDDER TRIM

NO. 1 ENGINE DATA AT 3 MINUTES

EPR

N1 %

EGT °C

FUEL FLOW kg/hr

FINISH WEIGHT kg

MEAN WEIGHT kg