CHECK FLIGHT CERTIFICATE

BOEING 757-300 **RB211-535E4-B engines**	**CFS 315 Issue 3**	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.:

NOTES

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 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.

INTRODUCTION

This schedule is applicable only to Boeing 757-300 aircraft. It 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 test flights, however, the crew are expected generally to monitor the behaviour of all equipment and report any unserviceable items. In addition to completing all the required tests in this schedule, any characteristics which are considered unsafe or undesirable must be recorded.

The minimum flight crew for this test shall be increased by one observer to record the results of the tests. Passengers should not be carried. Oxygen shall be available for all persons on board. Passenger drop-out oxygen panel latches should be lowered before flight. The test should, if possible, be carried out in the sequence as written; altitude conditions must be observed.

The data contained in this schedule is correct at the time of writing, but might not be in agreement with subsequent Flight Manual amendments. In cases of conflict the current Flight Manual is over-riding and CAA (Safety Regulation Group) should be informed.

The crew of the aircraft must be familiar with the contents of this schedule before flight. In addition the pilot conducting the tests must be specifically approved by the CAA (Safety Regulation Group) to carry out Check Flights on Boeing 757.

LOADING AND CALCULATION OF WEIGHT

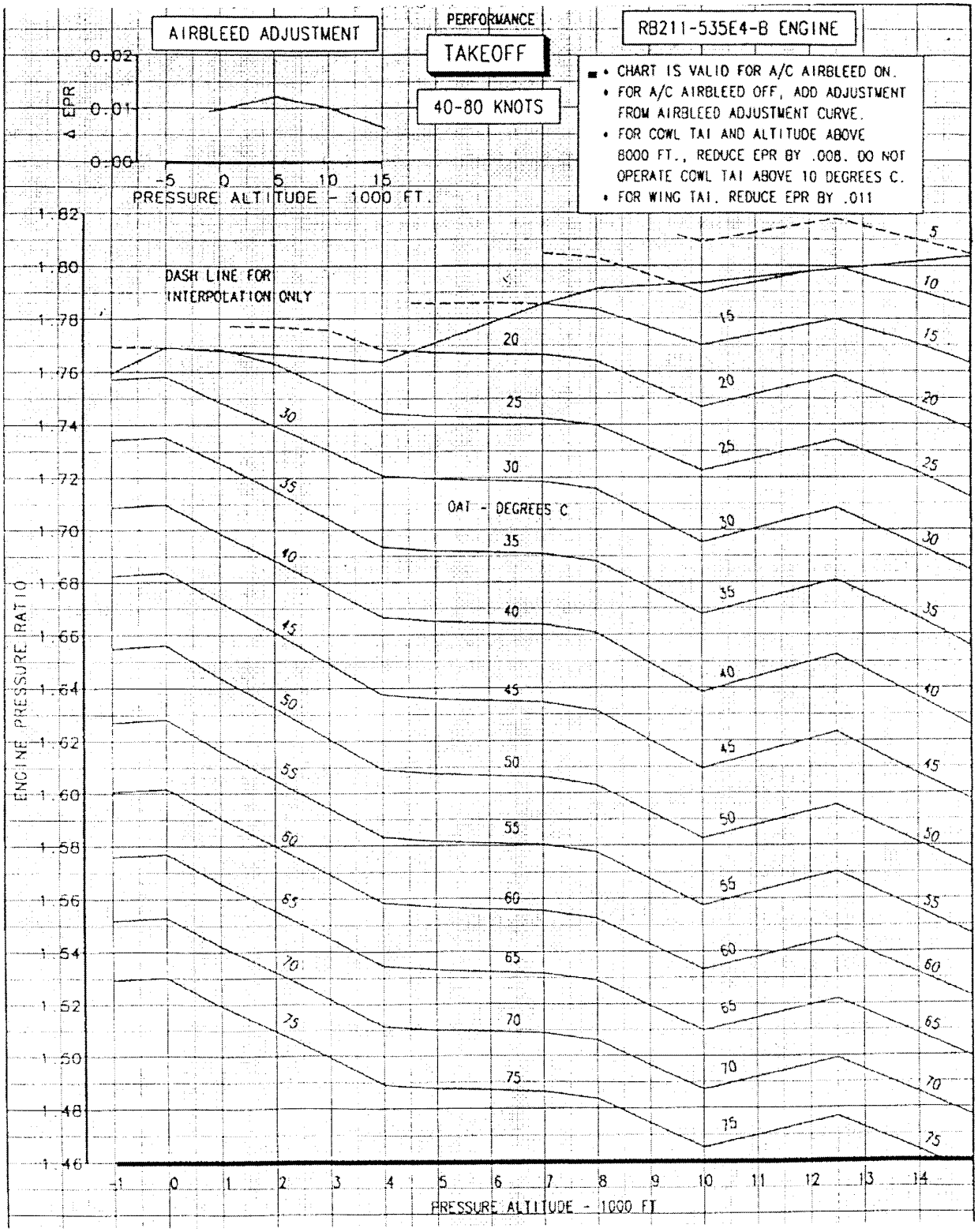
The aircraft is to be loaded to between 80,000 and 90,000 kg with a CG between 13% and 23% MAC.

The actual values shall be recorded; where specific tests require the aircraft weight to be recorded, it shall be calculated from the "fuel quantity".

POST-FLIGHT ACTION

Complete a statement of defects, sign the Check Flight Certificate and state clearly whether or not the aircraft needs to be re-flown. Pass the completed Check Flight Schedule and Certificate to the CAA (Safety Regulation Group) Supervising Surveyor.

B757-300 with RB211-535E4-B engines : Take-off EPR



B757-300 with RB211-535E4-B engines

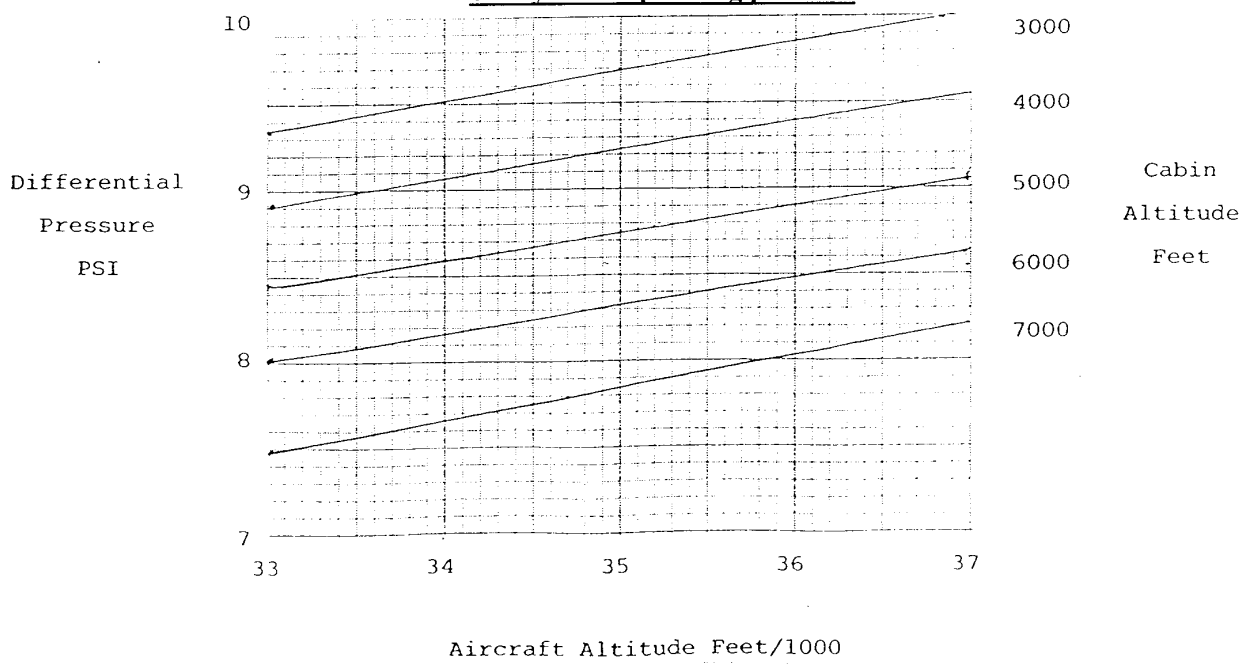
8 second thrust target EPR

TAT	EPR
below 22 °C	1.728
24 °C	1.718
26 °C	1.710
28 °C	1.702
30 °C	1.692
32 °C	1.682
34 °C	1.672
36 °C	1.663
38 °C	1.651

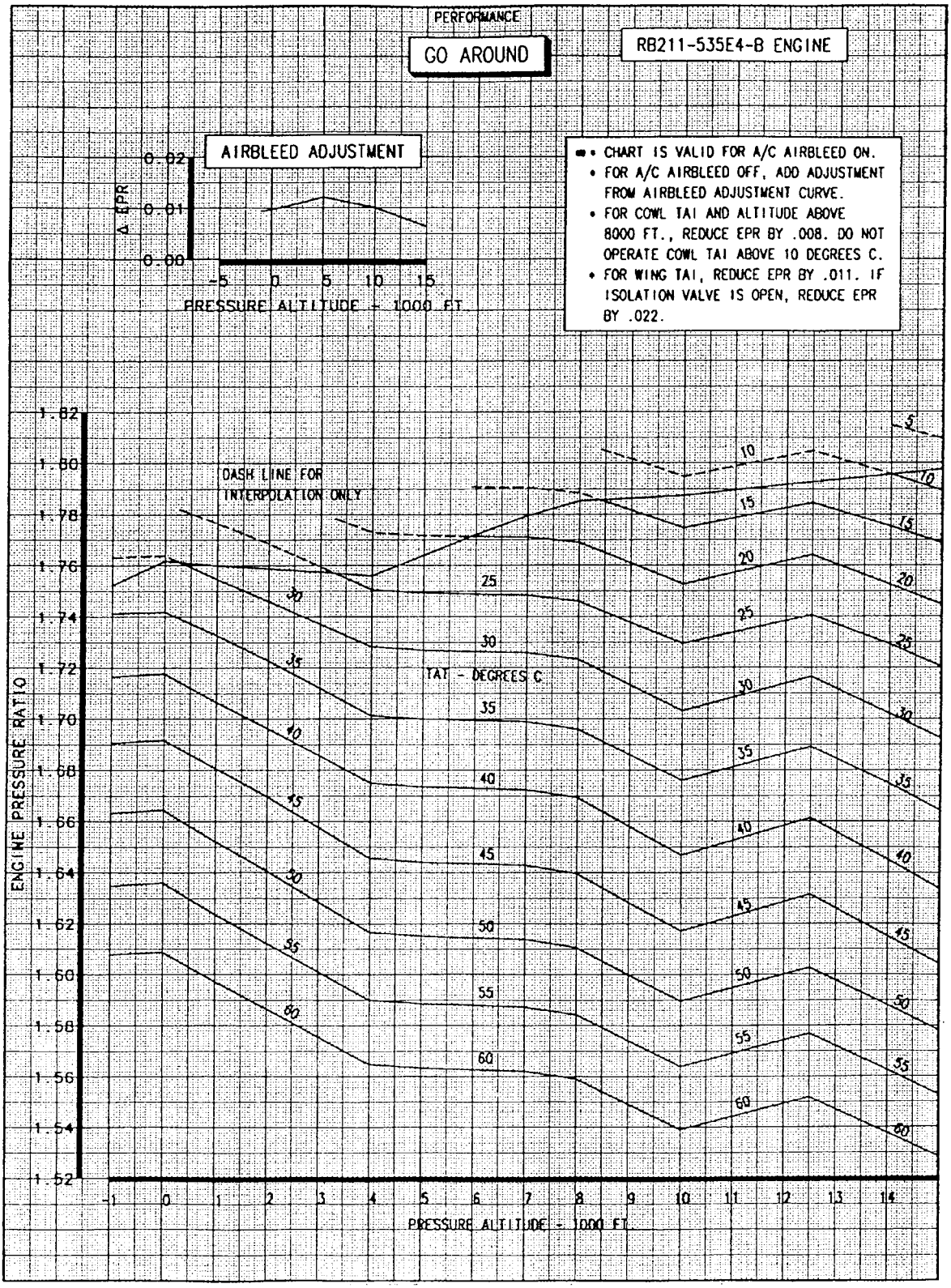
20 flap V2 and ERC scheduled speeds

		ERC speed - KIAS	
Weight - kg	20 flap V2 - KIAS	10,000 feet	20,000 feet
140,000	172	281	286
135,000	169	276	280
130,000	166	271	275
125,000	162	266	270
120,000	159	261	264
115,000	156	255	258
110,000	153	250	252
105,000	150	244	246
100,000	147	238	240
95,000	144	232	234
90,000	141	225	228
85,000	137	218	221
80,000	134	212	214
75,000	130	205	207
70,000	130	198	200
65,000	128	191	192
60,000	127	184	185

Safety valve operating pressure



B757-300 with RB211-535E4-B engines : Go-around EPR



B757-300 Stall speeds - flaps up & gear up									
	10,000 feet			15,000 feet			20,000 feet		
Weight - kg	Trim	Warning	Stall	Trim	Warning	Stall	Trim	Warning	Stall
130,000	225	205	-	230	210	-	237	217	-
125,000	219	200	-	224	205	-	231	212	-
120,000	214	195	-	219	200	-	225	206	-
115,000	209	191	-	213	195	-	218	200	-
110,000	204	186	-	208	190	-	213	195	-
105,000	198	181	-	201	184	-	206	189	-
100,000	193	176	-	196	179	-	200	183	-
95,000	187	171	-	190	174	-	194	178	-
90,000	181	165	-	184	168	-	188	172	-
85,000	175	160	-	177	162	-	181	166	-
80,000	170	155	-	172	157	-	175	160	-
75,000	163	149	-	165	151	-	168	154	-
70,000	158	144	-	160	146	-	162	148	-
65,000	151	138	-	153	140	-	155	142	-
60,000	146	133	-	147	134	-	149	136	-

B757-300 Stall speeds - flaps 20 & gear up									
	10,000 feet			15,000 feet			20,000 feet		
Weight - kg	Trim	Warning	Stall	Trim	Warning	Stall	Trim	Warning	Stall
130,000	165	147	127	166	148	128	169	150	130
125,000	161	144	124	163	145	125	165	147	127
120,000	157	141	121	159	142	122	161	144	124
115,000	155	138	119	156	139	120	157	141	121
110,000	151	134	116	152	136	117	153	137	118
105,000	147	131	113	148	132	114	150	134	115
100,000	143	128	110	144	129	111	146	130	112
95,000	139	124	10-7	139	125	107	140	126	108
90,000	134	121	103	135	122	104	137	123	105
85,000	130	117	100	131	118	101	133	119	102
80,000	126	113	97	126	114	97	127	115	98
75,000	121	110	93	122	110	94	124	111	95
70,000	117	106	90	118	106	91	120	107	92
65,000	113	102	87	113	102	87	114	103	88
60,000	108	98	83	109	98	84	109	99	84

B757-300 Stall speeds - flaps 30 & gear down									
Altitude	10,000 feet			15,000 feet			20,000 feet		
Weight - kg	Trim	Warning	Stall	Trim	Warning	Stall	Trim	Warning	Stall
130,000	157	134	121	159	135	122	160	136	123
125,000	153	131	118	155	132	119	156	133	120
120,000	151	128	116	152	129	117	152	130	117
115,000	147	125	113	148	126	114	150	127	115
110,000	144	122	111	144	123	111	146	124	112
105,000	140	119	108	140	120	108	142	121	109
100,000	137	116	105	138	117	106	138	118	106
95,000	133	113	102	134	114	103	134	115	103
90,000	129	110	99	130	111	100	130	112	100
85,000	125	107	96	126	108	97	126	109	97
80,000	121	104	93	121	105	93	122	105	94
75,000	117	102	90	117	102	90	118	102	91
70,000	113	99	87	113	99	87	113	99	87
65,000	108	96	83	108	96	83	109	96	84
60,000	104	93	80	104	93	80	105	93	81

NB: Warning & stall speeds are defined for 22% MAC.

Corrections: Warning & stall speeds: Flaps up increase speeds by +1 knot for 5% further forward CG.
Flaps down increase speeds by +1 knot for 8% further forward CG.

Tolerance for all speeds is +/- 5 knots.

Warning speeds are for normal trigger points. If the wing TAI has been switched on for more than 5 seconds in flight the trigger points will be latched to the icing schedule. This means that the warning speeds need to be increased by: 5 knots (clean) ; 7 knots (flaps 20) ; 6 knots (flap 30)

PRE-FLIGHT INFORMATION

Aircraft Registration	
Operator	
Date	
Place	

Crew:	1st Pilot		2nd Pilot	

Observer	
Total Airframe Hours	
Date of last airworthiness flight test	
Hours since last major maintenance	

Time:	Chocks Under		Landing	
	Chocks Away		Take-off	
	Total chock to chock		Total Airborne	

Ramp Weight		C.G.	% SMC
Zero Fuel Weight			

TEST SCHEDULE

Except where otherwise indicated the flight techniques are those associated with normal operation of the aircraft, for example, all dampers engaged. Fuel symmetry must be maintained across the aircraft.

1. **FUNCTIONING ONE**

1.1 Before Starting Engines

1.1.1 Warning Systems

Check : All warning lights
Record any lights which have faulty filaments

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Check:

1. Fire Warning Test SAT/UNSAT
2. Ground Proximity System Test SAT/UNSAT
3. Air Data Computer Test
   Overspeed Warning for 2 secs
   Invalid Flags for 5 secs
   Air Data Instruments Indicator
   10,000 ft 137 kts 347 kts VMO Needle
   decreases and then increases

   Left System SAT/UNSAT Right System SAT/UNSAT

4. Stall Warning Test
   With flaps set at 1°, check operation of stall warning and autoslat (visual observations from the cabin).
   NB. After first check, wait 10 seconds to allow autoslat to reset.

   Left System SAT/UNSAT Right System SAT/UNSAT

1.1.2 Flight Deck Placards

Check:

- Airframe Limitations SAT/UNSAT
- Engine Instrument Colour Coding on EICAS SAT/UNSAT
- Flight Deck Engraving, Instrument Panels and circuit breakers

- VMO Pointer Reading P1 [ ] P2 [ ] SAT/UNSAT
  limits 345 - 349 kts

1.1.3 EFIS Switching

Select alternate EFIS. Check for proper displays, instrument switching annunciations and return to normal.

P1. SAT/UNSAT P2. SAT/UNSAT

Select alternate IRS check for proper displays, instrument switching annunciations and return to normal.

P1. SAT/UNSAT P2. SAT/UNSAT

1.1.4 Autospeed-brakes

With throttles closed
Deploy speedbrake lever to 'ARM'
Check speedbrakes deploy SAT/UNSAT
Advance No.1 throttle to 1 inch forward
Check speedbrakes retract SAT/UNSAT
Close No.1 throttle and redeploy autospeedbrakes
Advance No.2 throttle to 1 inch forward
Check speedbrakes retract SAT/UNSAT

1.1.5 Stabiliser Trim

Check operation of stabiliser:
On control column switches SAT/UNSAT
On manual trim levers SAT/UNSAT
Stabiliser trim cut out switches SAT/UNSAT
(check each in turn and note operation at half rate)
Stabiliser trim brake by opposing trim with control column SAT/UNSAT
Check manual trim levers will override trim brake SAT/UNSAT

1.1.6 Take-off Configuration Warning

While the CONFIG test switch is held in the T/O position, check the Take-off Configuration Warning sounds and the Master Warning, red CONFIG light and EICAS message appears for each of the following conditions:

a. Speedbrake lever is out of the DOWN detent SAT/UNSAT
b. Stabiliser trim not between 2 and 7 units SAT/UNSAT
c. Flaps out of take-off configuration(note: the -300 is not approved for 1 flap take-offs) SAT/UNSAT
d. Parking brake set SAT/UNSAT

1.2 After Starting Engines

1.2.1 Thrust Rating Computer

Record: Airfield pressure altitude at 1013 mb [ ] TAT [ ]

Take-off EPR Achieved [ ]

A/C AIRBLEED ON Scheduled [ ]

(see page 2)

Take-off EPR Achieved [ ]

A/C AIRBLEED OFF Scheduled [ ]

(see page 2)

1.2.2 Brakes

1. During low speed taxi verify braking action from right hydraulic system by monitoring right hydraulic pressure on EICAS. SAT/UNSAT

2. Depressurise right hydraulic system and verify braking action from left hydraulic system by monitoring left and right hydraulic pressures on EICAS. SAT/UNSAT

3. Depressurise left hydraulic system and check that L hydraulic system pressure is zero. BRAKE SOURCE light and EICAS message shall illuminate. Braking action shall be maintained with accumulator pressure. SAT/UNSAT

   Depressurise brake accumulator by operating brakes. SAT/UNSAT

   Note: Nose gear steering inoperative.

4. Push the RESERVE BRAKES switch on the pilot's panel, the right EMP LOW PRESS light shall extinguish, accumulator pressure will read normal and BRAKE SOURCE light shall extinguish. Braking shall be normal. SAT/UNSAT

5. Pressurise right hydraulic systems and push the RESERVE BKS switch OFF. SAT/UNSAT

6. Pressurise left hydraulic system and check normal brakes and steering. SAT/UNSAT

7. Depressurise left system and check nosewheel steering operative through the power transfer unit. SAT/UNSAT

8. Repressurise the left system.

1.2.3 Take-off Configuration Warning

With engines operating and any one of the conditions above check the Take-off Configuration Warnings occur when either engine is increased to 70% N1. SAT/UNSAT

Set 8,000 feet cabin altitude

2. TAKE-OFF

Carry out a normal take-off.
Record any unusual characteristics.

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3. FUNCTIONING TWO - ENGINE ACCELERATIONS

Pressurisation on, anti-icing off. With gear down flaps 25° (in order to achieve approach idle) at 140 knots. Between 4,000 ft and 7,000 ft.

Record: Altitude [ ] TAT [ ]

Thrust Computer Go-Around EPR [ ]

Target 8 second thrust (see page 3) [ ]

For each engine record the engine flight idle stabilised N1 and the time to accelerate to 0.02 EPR below the target.

	LEFT	RIGHT	
Engine Idle N1			
Time to accelerate			8 seconds max.

4. Take-Off Climb

Clear of cloud and turbulence carry out a measured climb for 5 minutes from a starting altitude between 4000 ft and 7000 ft.

Conditions.

Gear up
Flaps 20°
RIGHT engine idle
LEFT engine go-around power (see page 4)
Pressurisation on
Engine anti-icing off
Airframe anti-icing off

Take-off safety speed V_2 for the weight (page 3) [ ]

Captain's altimeter set at 1013 mb.

Zero fuel weight	Kg		
Fuel contents	Kg	Kg	Kg
Aircraft weight	Kg		

Time	Altimeter (1013mb)	ASI P1	TAT	Left EPR (go-around)	Right EPR (idle)
0					
$^1/_2$					
1					
$1^1/_2$					
2					
$2^1/_2$					
3					
$3^1/_2$					
4					
$4^1/_2$					
5					

Trim positions		
	Aileron	
	Rudder	
	Elevator	

Airspeed comparison	
Pilot	
Co-pilot	

Engine data				
	N1			
	EGT		N3	
	N2		Fuel flow	

At the end of the climb, record:-

Zero fuel weight	Kg		
Fuel contents	Kg	Kg	Kg
Aircraft weight	Kg		

4.1 Speed Trim Check

At the end of the climb increase speed by 20 kt without retrimming.
Check stabiliser trim moves nose up: SAT/UNSAT

5. En-route climb

Clear of cloud and turbulence carry out a measured climb for 5 minutes from a starting altitude the higher of 5000 ft above terrain or flight level 100 but not above flight level 160.

Idle the LEFT engine for 5 minutes before shutting down with the APU generator OFF.
Confirm satisfactory instrument transfer.
Select the APU generator ON.

Gear up
Flaps up
LEFT engine INOPERATIVE
RIGHT engine M.C.T.
Pressurisation on
Engine anti-icing off
Airframe anti-icing off
Engine out en-route climb speed for the weight (see page 3)
Captain's altimeter set to 1013 mb.

Zero fuel weight	Kg		
Fuel contents	Kg	Kg	Kg
Aircraft weight	Kg		

Time	Altimeter (1013mb)	ASI P1	TAT	Left EPR (inoperative)	Right EPR (MCT)
0					
$^1/_2$					
1					
$1^1/_2$					
2					
$2^1/_2$					
3					
$3^1/_2$					
4					
$4^1/_2$					
5					

Trim positions			Airspeed comparison	
	Aileron		Pilot	
	Rudder		Co-pilot	
	Elevator			

Engine data				
	N1			
	EGT	°C	N3	
	N2		Fuel flow	

At the end of the climb, record:-

Zero fuel weight	Kg		
Fuel contents	Kg	Kg	Kg
Aircraft weight	Kg		

6. FUNCTIONING THREE

Max. Altitude 20,000 ft

6.1 Engine Relight

(a) Make a starter assisted relight on **left** engine below 20,000 feet and 160 knots with gear up and flaps 15° .

Record:

Altitude		TAT	°C
Engine windmilling speed			
Time to EGT rise		30 seconds max.	
Maximum EGT during relight		570 °C max.	
Time to idle		2 minutes max.	

Shut down APU. Leave the left engine at flight idle for 5 minutes before increasing power.

Note: Do not exceed 20,000 ft with flap selected down.

6.2 PTU Check

Extend landing gear and select flap 20° reducing speed to 130 kt IAS.
Select LEFT EDP 'OFF'.
Time landing gear retraction at 130 kt IAS .....(20 sec max)
Select LEFT EDP 'ON'.
Increase speed to En-route climb speed retracting flaps to up.

6.3 Low Cabin Pressure

Pull circuit breaker N24 to isolate the No.2 system auto controller.
During a climb to flight level 180 select MAN MODE and raise cabin altitude.
Record :

Cabin Altitude Warning [ ] 9250 - 10750 ft

Check :

Crew Oxygen Masks SAT/UNSAT
Oxygen Mask Microphones SAT/UNSAT

Record:
Cabin Altitude at Oxygen Mask Drop Out [ ] < 15,000 feet

Lower cabin altitude and control cabin rate by turning packs on and off.

Record any mask panels which fail to drop.

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Reset normal pressurisation when cabin altitude is below 8,000 ft and with a low rate of descent.

Reset passenger oxygen by cycling passenger oxygen control circuit breaker.

Reset N24 circuit breaker.

Start APU but select generator OFF.

7. FUNCTIONING FOUR

7.1 Controls and Trims

At flight level 350 in steady cruise note:

Mean altitude	
I.A.S.	
Mach	

Trims: Stabiliser [ ] Rudder [ ] ±3 div Aileron [ ] ±1 div

(a) Check controls for:
Breakout, centering, weight and response. SAT/UNSAT

(b) Check operation of trimmers:
Stabiliser on control column switches SAT/UNSAT
Rudder
SAT/UNSAT
Aileron SAT/UNSAT

(c) Check operation of yaw dampers by initiating a gentle Dutch roll with a rudder input with all dampers off.
Check that each yaw damper in turn stops the Dutch roll oscillation.

Left SAT/UNSAT Right SAT/UNSAT

Reselect all yaw dampers on.

7.2 High Cabin Pressure

7.2.1 Maximum Differential

1. At 35,000 feet aeroplane altitude select MAN, toggle the outflow valve to achieve 8.4 psi set MIN on the rate control and select AUTO 2.

2. The cabin pressure differential shall increase to 8.6 ± 0.25 psi. [ ]

3. Select AUTO 1 and check that cabin remains at 8.6 ± 0.25 psi. [ ]

7.2.2 Safety Valve

1. Drive the outflow valve toward full CLOSED in MAN mode. The cabin pressure shall limit to the primary value of the pressure relief (SAFETY) valve. Record the indicated differential pressure, cabin altitude and flight altitude.

DIFF [ ]

CABIN ALT [ ]

FLTALT [ ]

2. Use recorded cabin altitude and calculate the cabin differential pressure by comparing to the flight altitude. The calculated differential pressure shall not exceed 9.05 psi ± 0.2 psi (see page 3). [ ]

NOTE: Do not exceed 9.4 psi indicated pressure.

Drive the outflow valve to OPEN to reduce differential pressure, then select AUTO mode.

8. **HIGH MACH**

Trim the aircraft at flight level 350 in a level cruise at 0.82 IMN.

Record: Altitude [ ] IAS [ ] Mach [ ] TAT [ ]

ASI limit speed hand [ ] kts (Limits: 280-286 kts (Mmo 0.84)) or 288-294 (Mmo 0.86)

Apply maximum continuous thrust and accelerate slowly to 0.86 IMN. Do not trim above 0.84 IMN. Record indicated Mach number at high speed warning (left and right sides can be determined by the appropriate filaments in the dedicated **OVSP** red warning light.

Captain	Co-Pilot

Limits: 0.845 to 0.855 IMN (Mmo 0.84) or 0.862 – 0.87 (Mmo 0.86)

Note handling qualities at 0.86 IMN (slight push force required). SAT/UNSAT
Extend airbrakes at 0.86 IMN (no roll and a gentle pitch up). SAT/UNSAT

9. **FUNCTIONING FIVE**

Start the APU at 35,000 ft and 0.76M SAT/UNSAT

9.1 Engine relighting. Flight level 290 for RB211-535E4
Idle **RIGHT** engine for **5** minutes

With APU generator selector switch OFF
Shut the fuel off the **RIGHT** engine and check satisfactory instrument transfer SAT/UNSAT
Select APU generator switch ON
After 3 minutes relight right engine using a windmill relight technique at 29,000 ft and 290 knots.

Record: Altitude [ ] TAT [ ]

Engine windmilling speed N1 [ ] N2 [ ] N3 [ ]

Time to light [ ] 30 seconds max

Maximum EGT during relight [ ] 570° max

Time to idle [ ] 2 minutes max

Leave the right engine at flight idle for **5** minutes before increasing power.

10. **HIGH I.A.S.**

At any convenient altitude between flight level 150 and 200 clear of cloud and turbulence, trim the aircraft in level flight at 350 knots.

Record: Limit speed hand pointer [ ] 345-350 kts

Trims: Stabiliser [ ] Rudder [ ] ±5 div Aileron [ ] ±1 div

Accelerate slowly by applying power to 370 knots IAS. Record indicated airspeed at high speed warning (left and right sides can be determined by the appropriate filaments in the dedicated **OVSP** red warning light).

Captain	Co-Pilot	
		350 - 360 kts

Operation of controls over small angles SAT/UNSAT

Extend speed brakes at 370 knots (gentle nose up pitch with no roll). SAT/UNSAT

11. **STALLS, GEAR AND FLAP TIMES**

Flight level 150 to 100

With power off and flaps up carry out a straight speed reduction at approximately 1 kt/sec to stall warning from a trim speed of 1.3 VS (see page 5). Recover if no stall warning is noted by 5 kts below the scheduled speed or if heavy buffet is experienced.

Record weight [ ]

Trim Speed [ ] Trim Setting [ ]

Stick Shaker Speed Scheduled [ ]

Stick Shaker Speed Achieved [ ] Scheduled ± 5 knots

Start of Buffet [ ]

Any unusual characteristics .....

Time flaps up to 20° at 190 knots [ ] 38 sec max

Pull the right stall warning circuit breaker.
Carry out a slow straight stall approach, power off, to the stall warning.
Recover if no stall warning is noted by 5 kts below the scheduled speed or if heavy buffet is experienced.

Record weight [ ]

Trim Speed [ ] Trim Setting [ ]

Stick Shaker Speed Scheduled [ ]

Stick Shaker Speed Achieved [ ] Scheduled ± 4 knots

Functioning of slat from sealed to gapped (observation from cabin). SAT/UNSAT

Start of Buffet (if any) [ ]

Any unusual characteristics.....

Reinstate right stall warning circuit breaker.
Pull the left stall warning circuit breaker.
Carry out a slow straight stall approach, power off, to stall warning again recovering if no stall warning is noted by 4 kts below the scheduled speed or if heavy buffet is experienced.

Record weight [ ]

Stick Shaker Speed Scheduled [ ]

Stick Shaker Speed Achieved [ ] Scheduled ± 4 knots

Functioning of slat from sealed to gapped (observation from cabin) SAT/UNSAT

Reinstate left stall warning circuit breaker.

Time Gear Down [ ] 35 secs max

Time Flaps 20-30° at 160 knots [ ] 10 secs max

Carry out a slow straight power off approach to stall warning recovering if no stall warning is noted by 4 kts below the scheduled speed or if heavy buffet is experienced.

Record weight

Trim Speed Trim Setting

Stick Shaker Speed Scheduled

Stick Shaker Speed Achieved Scheduled ± 4 knots

Any unusual characteristics.....

12. TRAILING EDGE FLAP LOAD RELIEF

Deleted

13. FUNCTIONING SIX

13.1 Alternate Flaps

While observing flap limit speeds arm both LE and TE ALTN flap systems.

NOTE: Observations of slat positions should be made from the cabin.

a) Rotate the flap selector to 30° position and select GPWS gear over-ride.

Check the flaps extend within the time listed below:

Trailing Edge - 3 min 30 sec

Check the slat is gapped.

b) Rotate the flap selector to the 20° position and **restore GPWS gear over-ride.**

Check the Trailing Edge flaps retract to 20. SAT/UNSAT

c) Place the normal flap selector lever to 20º. Push both LE and TE ALTN flap switches OFF and rotate the alternate flaps selector to NORM. Rotate the alternate flap selector to UP. Raise the flaps with the flap selector lever.

Check the Leading Edge and Trailing Edge flaps retract fully. SAT/UNSAT

13.2 Alternate Landing Gear (Observe placard speeds)

Assure gear handle is OFF. Push the ALTN GEAR EXTENSION switch (if applicable, check the letters ALTN in the switch illuminate and remain on for approximately 5 seconds). Check the door amber light illuminates and 3 gear green lights illuminate within 25 seconds, gear disagree and gear doors warnings appear on EICAS. SAT/UNSAT

Wait a minimum of two minutes and place the landing gear lever DOWN and then select the gear lever UP. Check gear retracts and doors close normally. SAT/UNSAT

13.3 Ram Air Turbine (RAT)

1. Depressurise "C" hydraulic system (confirm EICAS warning).
2. Deploy RAT prior to approach and assure "C" Hydraulic pressure on EICAS (if available). SAT/UNSAT
3. Return "C" hydraulic system to normal.

13.4 Spoiler Warning

On approach with flap 25° check that speedbrakes warning occurs when the speedbrake is extended. SAT/UNSAT

14. **LANDING**

Carry out a normal landing usingfull reverse thrust and record any unusual characteristics.

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Reverse EPR Left [ ] Right [ ] RB211-535E4-B 1.28 EPR minimum

Note. Minimum values quoted for Sea Level pressure altitude.

Pressure Altitude [ ] ft

15. AFTER LANDING

15.1 Standby Power

With external power and APU generator off disconnect both generators and check that standby power light does not illuminate. SAT/UNSAT

Check the following items for correct operation:

VHF COMM 1	SAT/UNSAT
VHF NAV 1	SAT/UNSAT
LEFT RDMI	SAT/UNSAT
LEFT/RIGHT ADF (Depending on ETOPS fit)	SAT/UNSAT
CENTRE ILS	SAT/UNSAT
STANDBY ATTITUDE INDICATOR	SAT/UNSAT
STANDBY ALTIMETER	SAT/UNSAT
INSTRUMENT LIGHTING	SAT/UNSAT
FLIGHT INTERPHONE	SAT/UNSAT
FUEL QUANTITY	SAT/UNSAT
STANDBY ENGINE INSTRUMENTS (NOTE EPR INOPERATIVE)	SAT/UNSAT
RUDDER TRIM (TRIM INDICATOR INOPERATIVE)	SAT/UNSAT
RIGHT HALF OF UNDERCARRIAGE GREEN INDICATIONS	SAT/UNSAT
HIGH IDLE ON ENGINES	SAT/UNSAT

Reinstate both generators and check normal operation of electrics.

15.2 Engine Shutdown

Shut engines down using the fire handles.

Check: Spar valve shuts (Light cycles) SAT/UNSAT
Fuel Switches - OFF
Fire Handles - REINSTATE

15.3 Post Flight

Complete the climb analysis and record result on page 1 along with any recorded defects.

Amendment Record.

Issue 2

Section 5 High Cabin Pressure

Clarification of valve operating procedures

Section 12 Trailing Edge Flap Load Relief

This test has been deleted.

Section 13.1 Alternate Flaps

The test has been amended so that it finishes after the flaps have been retracted on the alternate system to 20º.

Issue 3

Section 1.4.6 Take-off Configuration Warning

Test amended to include check of all system inputs

Section 5 & 6

Sequences of tests 5 and 6 have been reversed such that the en-route climb immediately follows the take-off climb.

Section 11 High Mach

Test amended to include data for aircraft with 0.86 Mmo

Section 13.1(b) Alternate Flaps

Requirement to check slats sealed deleted

Amendment Record for Issue 2 amended to correct flap position for Alternate Flap Check.