

OPERATIONS MANUAL  
FLT CREW TRAINING

COMMERCIAL LEVEL SIMULATIONS

 **AIRBUS INDUSTRIE**

**A340-500/600**

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TAXI, TAKEOFF, CLIMB, CRUISE, DESCENT & LANDING

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This manual is not intended for real world flight.

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**Commercial Level Simulations - Airbus A340-500/-600  
Version 2005.1.0**

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The visual model, 2D panel, virtual cockpit, virtual cabin, flight model and sounds are based on the most realistic data obtainable for the Airbus A340-500 / -600, and actual Flying Pilot / Non-Flying Pilot flight experience on A340 series flight decks.



## PREFACE

This manual serves as a reference for operating procedures and training maneuvers. The flight profiles show the basic recommended configuration during flight.

The maneuvers should normally be accomplished as illustrated. However, due to airport traffic, ATC distance separation requirements, and radar vectoring, modifications may be necessary.

Exercise good judgment.

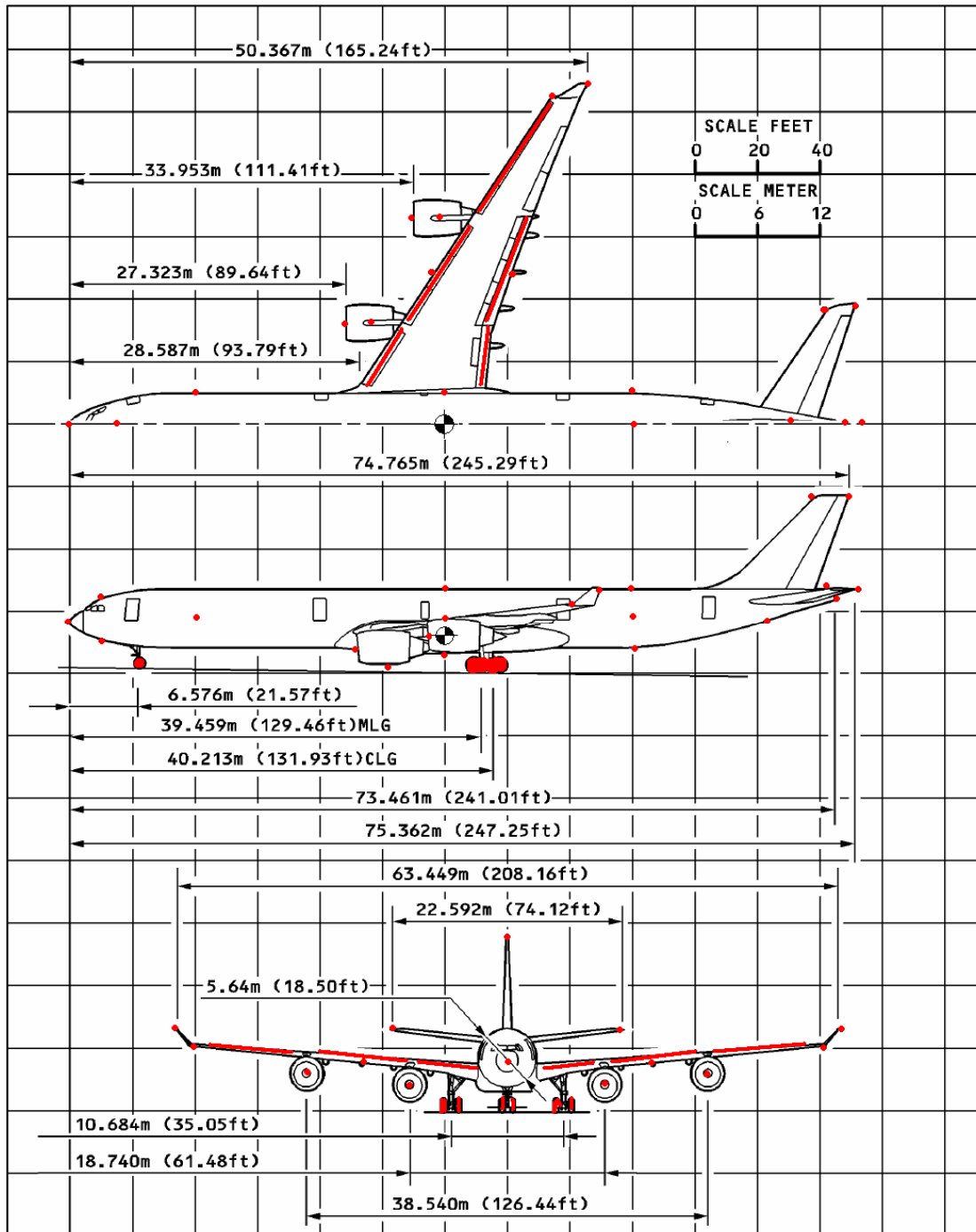




## PRINCIPLE DIMENSION AND AREAS

### Airbus A340-500, A340-600 – Aircraft Reference Manual

#### Airbus A340-500/600 - Specs



## Airbus A340-500/-600 – Specs (cont'd)



### **Dimensions (-500):**

Span 208 ft 16 in  
Length 216 ft 7 in  
Height 57 ft 20 in

### **Dimensions (-600):**

Span 208 ft 16 in  
Length 241 ft 01 in  
Height 57 ft 20 in

### **Engines:**

RR Trent 556 x 4  
TO Thrust Rating: 56,000 lb

RR Trent 560 x 4  
TO Thrust Rating: 60,000 lb



### **Weight and Capacities**

MaxTOW: 804,700 lb (-600)

ZFW: 424,700 lb (-600)

Max Fuel Cap.: 51,480 US Gal (348,004 lb)

### **Performance**

Typical Cruise Speed:

M.86 – Max/High Speed Cruise

M.84 – Normal Cruise

M.82 – Long Range Cruise

M.80 – Ultra Long Range Cruise

### **Fuel Arrangements**

Range: 7,500 nm (-600, with typical 4000 FT interval step climb)

Typical Fuel flow: 5500 pph per engine (22,000 pph total ) @ cruise FL370

### **Airbus Fuel Calculation - Fuel specific gravity : 0.785 kg/l or 6.551 lbs/US Gal.**

Total A340-600 HGW Model Fuel = 53,494 gal

Total A340-600 Standard Model Fuel = 51,285 gal

Main Center Tank - Total - 54,969 liters

Trim Tank - Total - 8,361 liters

Add Tank - Total - Belly fuel pallets at 7,086 liters

Inner Wing Tanks 1 & 2 Left - 24,501 + 24,501 = 49,002 liters

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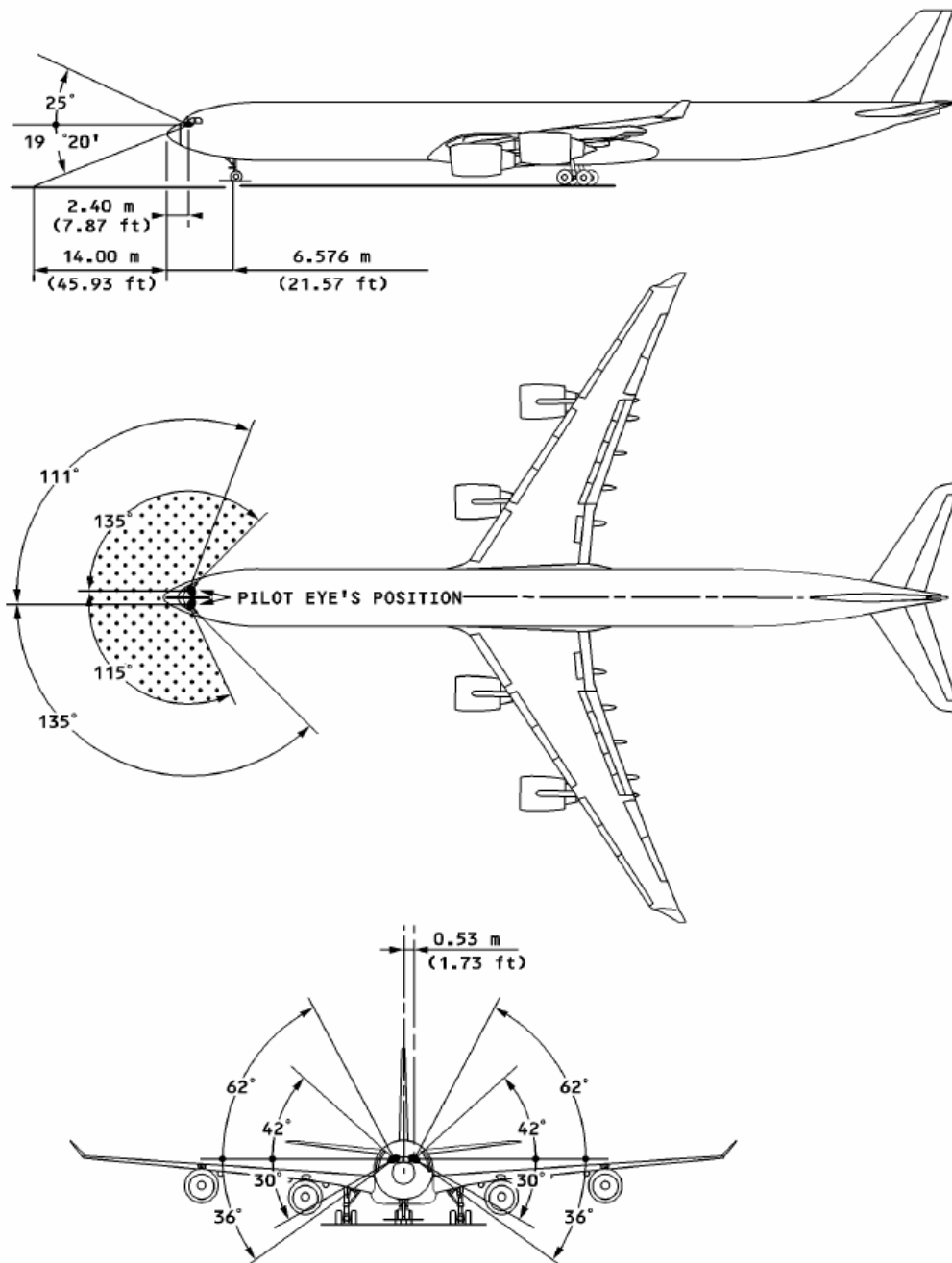
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Inner Wing Tanks 3 & 4 Right -  $24,501 + 24,501 = 49,002$  liters  
Outer Wing Tank Left - Total - 6145 liters  
Outer Wing Tank Right - Total - 6145 liters  
Fuel type – JetA

## BASIC PILOT INFORMATION

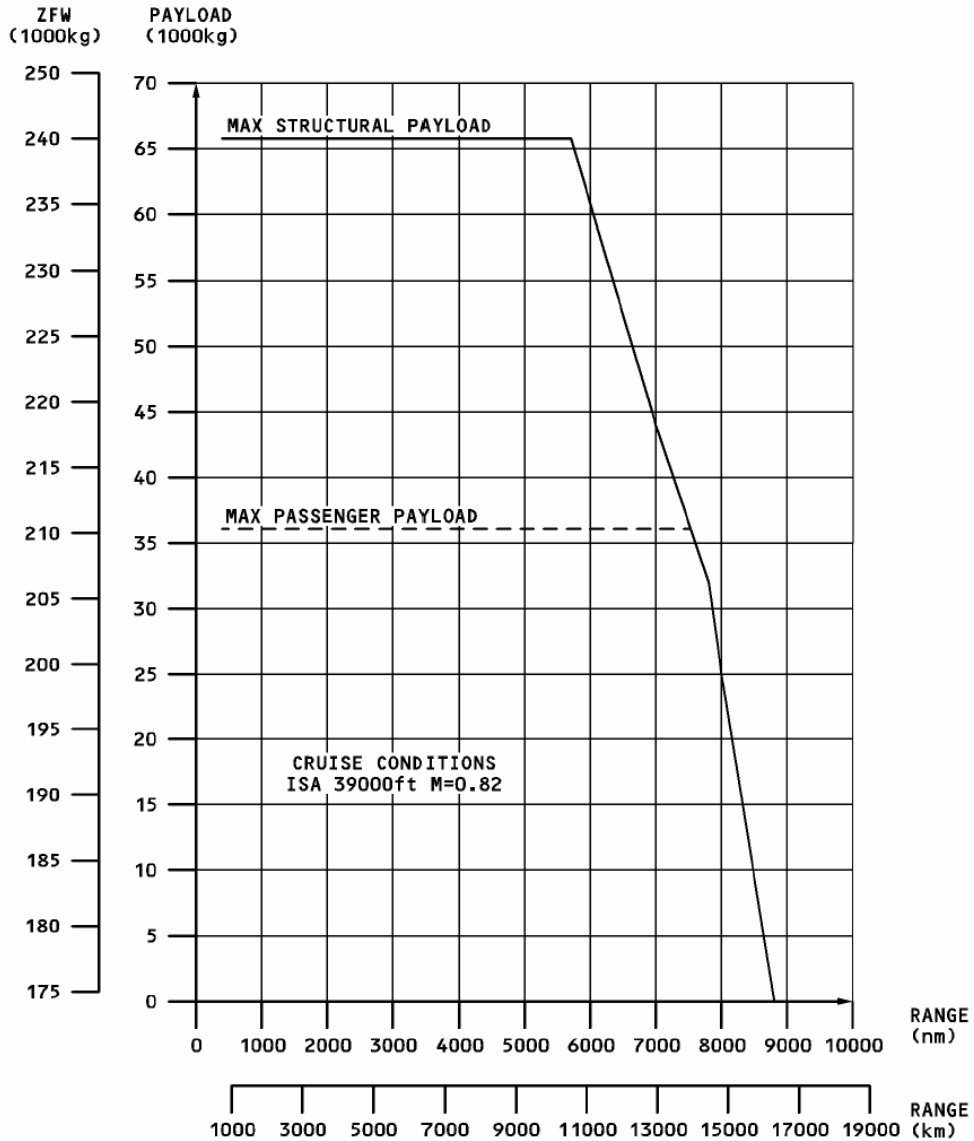
Pilot's view reference point is approximately 19.20 feet from the ground, with ground visibility limited to 45.93 feet looking down at an angle of 19.20 degrees. For proper engine and aircraft operations, the captain must view the EICAS as the engines and wings **are not** visible from the flight deck. Pilot's rearward view is based on the captain's eye reference point with 135 degrees of max travel.



## TAXI

1) Prior to taxi, select the flight plan in accordance with the aircraft range.

Range:

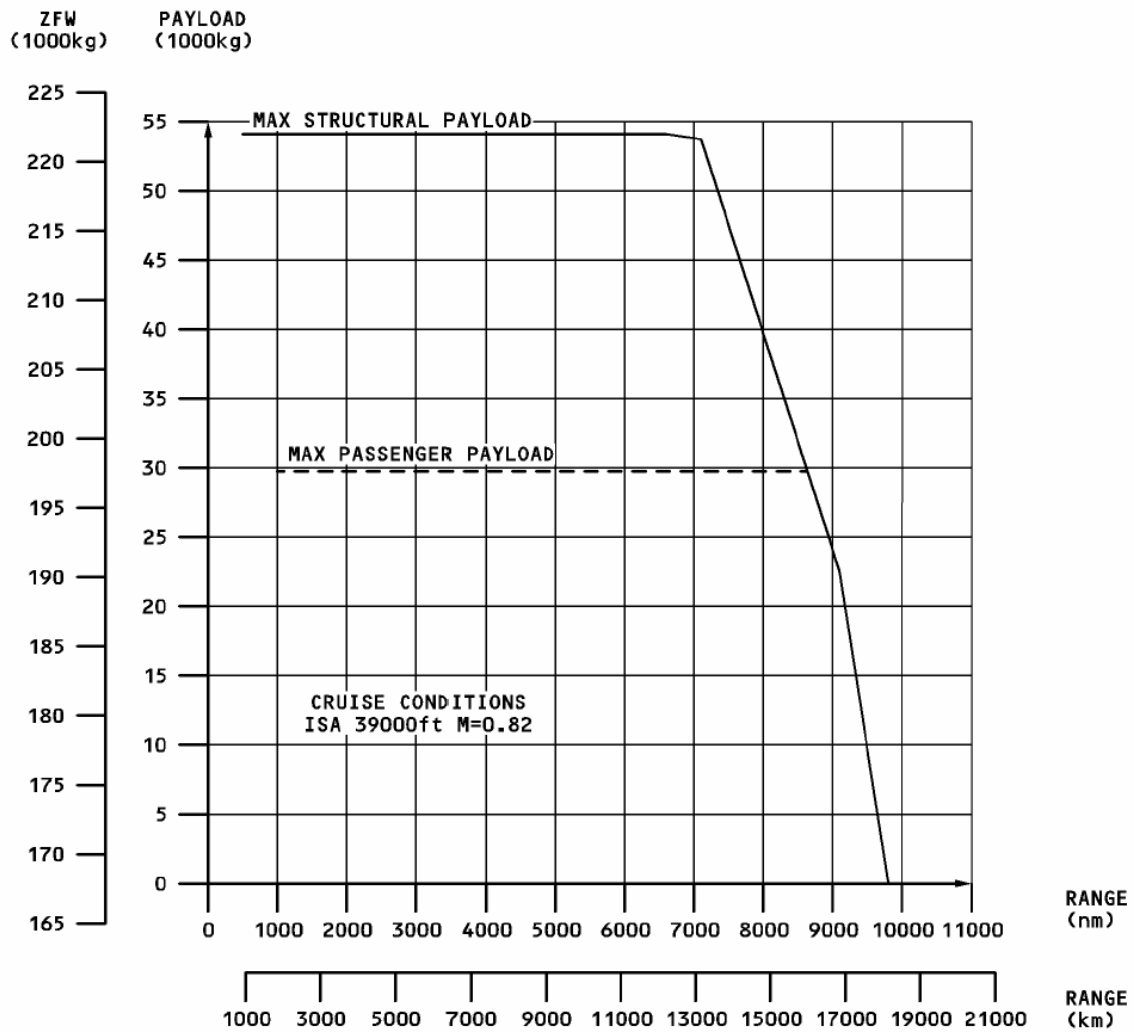


Payload/Range  
ISA Conditions - RB 211 TRENT 556 Engines  
A340-600 Model

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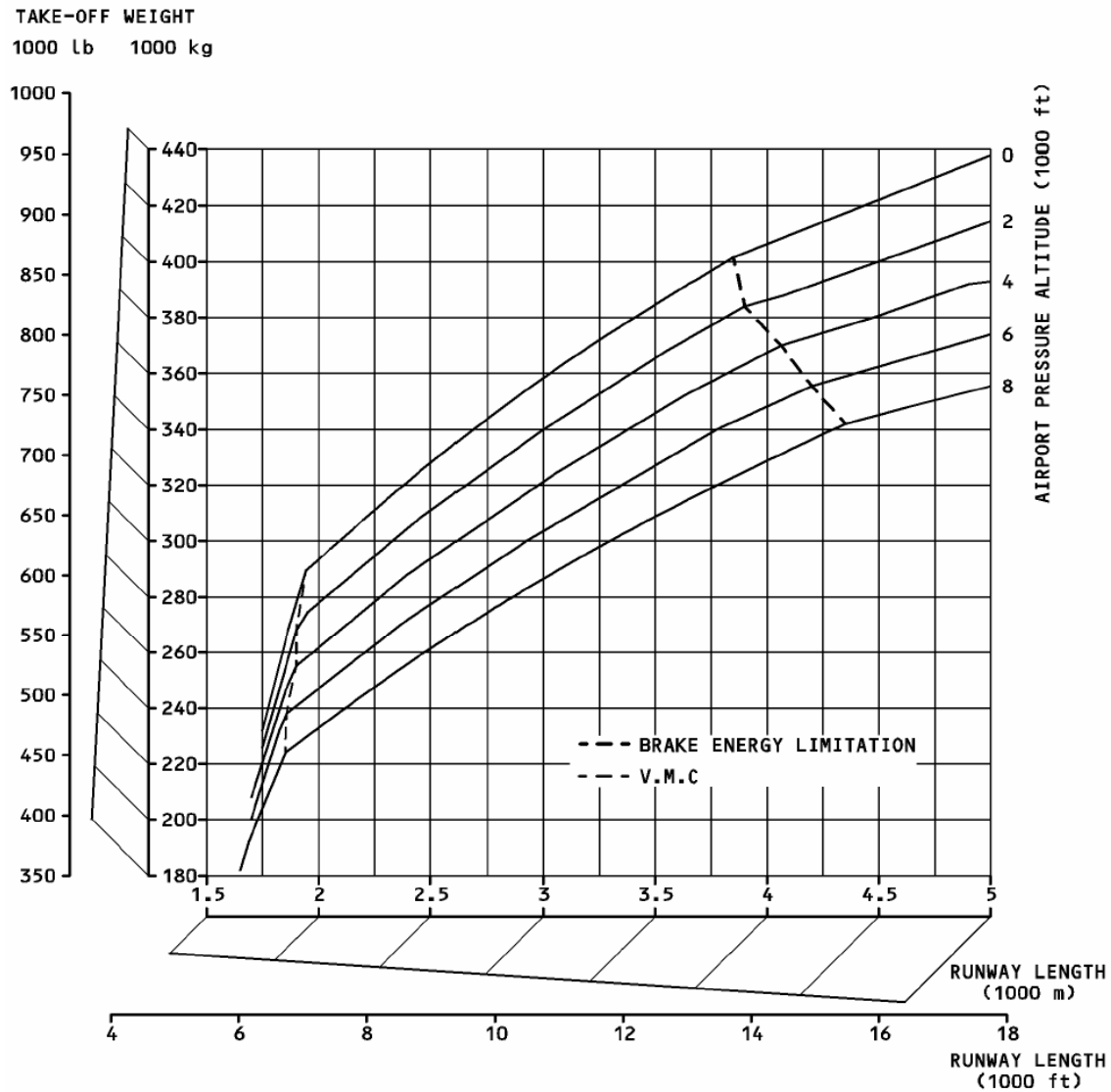
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Payload/Range  
 ISA Conditions - RB 211 TRENT 553 Engines  
 A340-500 Model

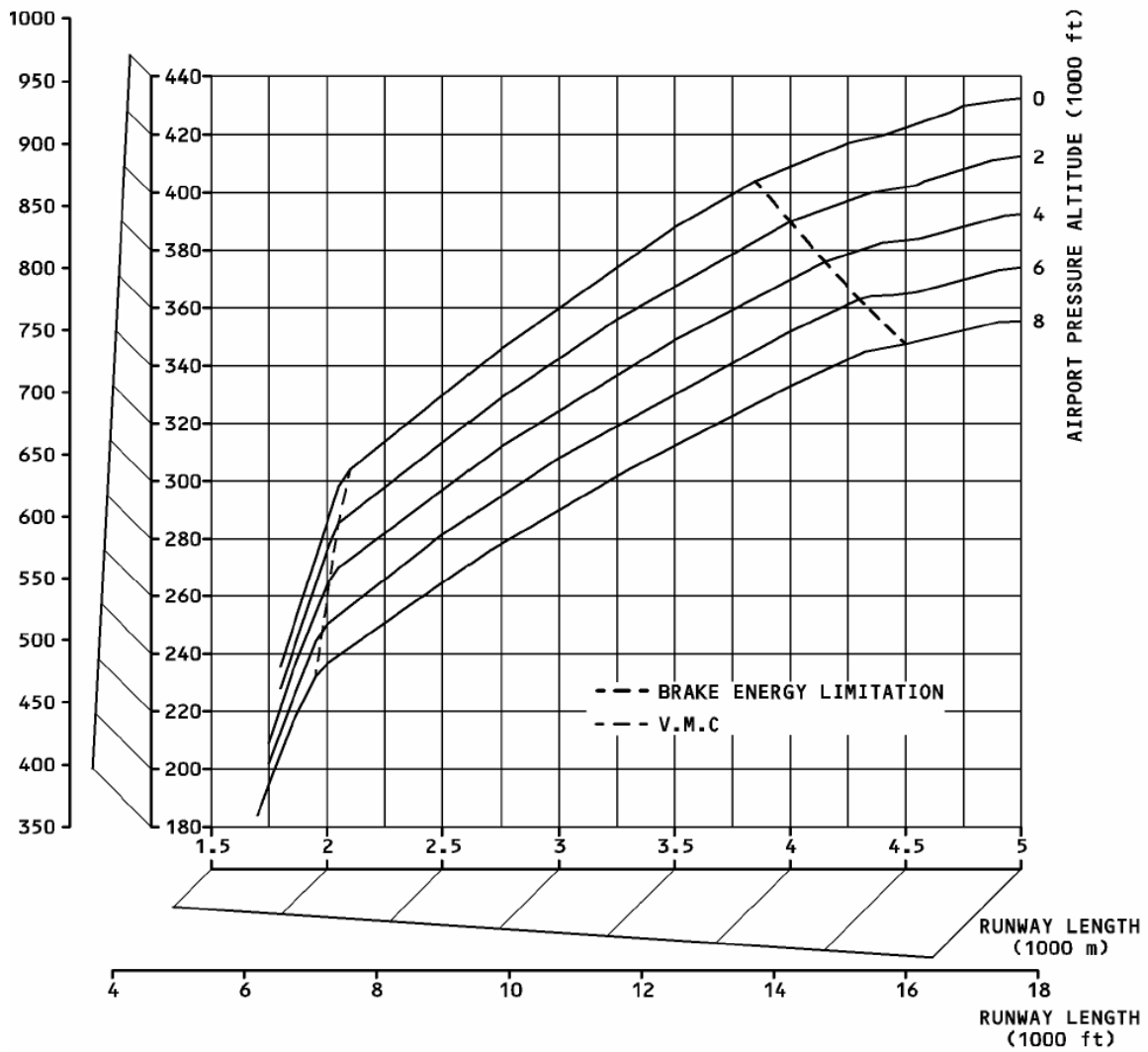
2) Determine the aircraft required runway takeoff length for the trip gross weight. **<NOTE:> At Maximum Takeoff Weight, the A340-600 requires 10,500 FT runway.**



FAR/JAR Take-Off Weight Limitation  
ISA Conditions - RB 211 TRENT 556 Engines  
A340-600 Model



TAKE-OFF WEIGHT  
1000 Lb 1000 kg



FAR/JAR Take-Off Weight Limitation  
ISA Conditions - RB 211 TRENT 553 Engines  
A340-500 Model

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3) Determine the aircraft reference speeds. These speeds are based on runway length and aircraft weight. **CLS recommended setting is CONF 3:**

OAT °C	CONF 3				
	10KT TAIL	5KT TAIL	0 KT	5KT HEAD	10KT HEAD
74	270.7 139/45/51	275.8 139/46/52	280.5 139/48/53	282.3 141/49/54	283.5 143/51/55
65	294.9 139/50/57	303.6 139/53/59	311.5 143/56/61	313.6 145/56/62	315.5 146/57/62
55	319.4 140/56/64	328.7 142/59/66	337.7 146/61/68	340.6 148/63/69	344.7 151/63/70
50	330.9 140/59/67	340.7 143/62/69	350.6 147/64/71	354.4 150/65/72	357.8 151/66/73
45	342.5 140/61/70	353.1 145/64/72	363.4 149/67/74	367.3 151/68/75	370.8 153/69/76
42	349.7 141/63/72	360.5 146/66/74	371.0 150/68/76	375.0 152/69/77	378.5 154/70/78
40	354.5 141/64/73	365.4 146/67/75	376.0 151/69/77	380.0 153/70/78	383.5 154/71/79
38	359.3 142/64/74	370.3 147/68/76	381.0 151/70/78	384.9 153/71/79	388.5 155/72/80
36	363.7 142/65/75	374.6 147/68/77	385.8 152/71/80	389.7 154/72/80	393.3 155/73/81
34	367.6 142/66/76	378.7 147/69/78	390.1 151/72/81	393.9 153/73/81	397.7 155/74/82
32	371.8 141/67/77	382.9 146/70/79	394.3 151/73/82	398.2 153/74/83	400.0 151/75/83
30	374.1 141/67/77	386.8 146/71/80	398.3 150/74/83	400.0 148/74/83	400.0 147/74/83
25	377.4 142/68/78	390.2 146/71/81	400.0 148/74/83	400.0 147/74/83	400.0 147/74/83
20	380.6 142/69/79	393.0 147/72/82	400.0 147/74/83	400.0 147/74/83	400.0 147/74/83
15	383.8 143/70/80	395.8 148/73/82	400.0 147/74/83	400.0 147/74/83	400.0 146/74/83
10	387.1 144/70/80	398.7 149/74/83	400.0 146/74/83	400.0 146/74/83	400.0 146/74/83
5	390.0 144/71/81	400.0 146/74/83	400.0 146/74/83	400.0 146/74/83	400.0 146/74/83
0	393.0 145/72/82	400.0 146/74/83	400.0 146/74/83	400.0 146/74/83	400.0 146/74/83
-5	396.0 146/72/82	400.0 146/74/83	400.0 146/74/83	400.0 146/74/83	400.0 146/74/83
-10	399.1 147/73/83	400.0 146/73/83	400.0 146/73/83	400.0 146/73/83	400.0 146/73/83

RTOW 1000Kg  
V1/VR/V2

**DRY**

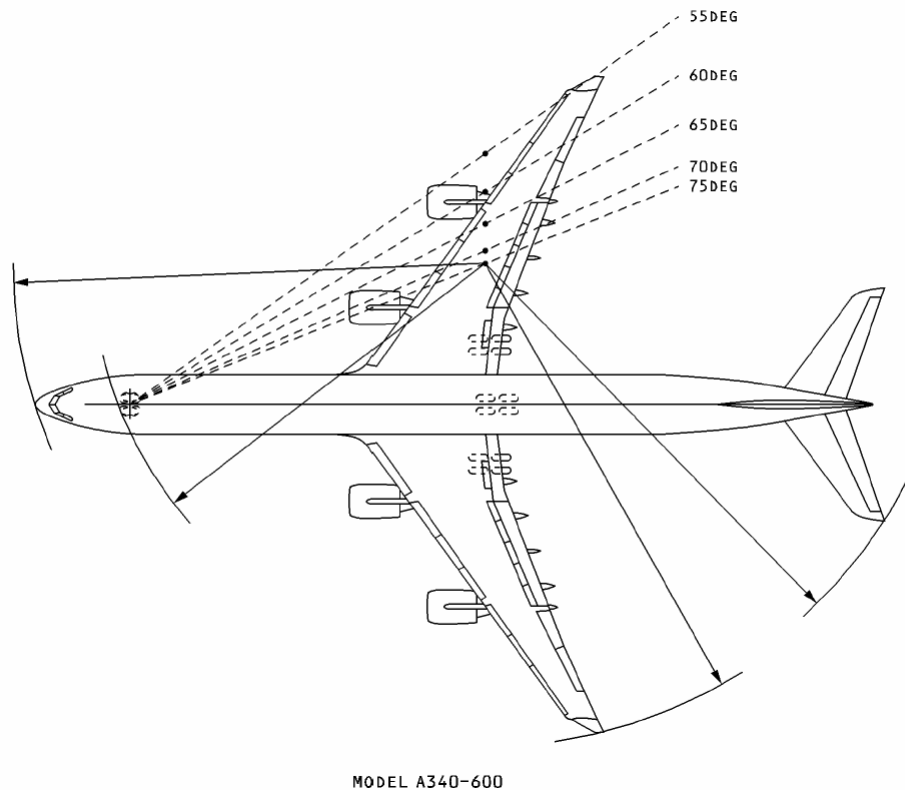
**AC OFF**

## A340-600 SPEEDS LIMITED BY VMC

Pressure altitude (ft)	-2000	0	1000	2000	3000	4000	5000	6000	10000	14600	V1 min = VR min = V2 min
CONF 1 + F	143	142	140	139	137	136	134	133	127	119	
CONF 2	143	142	140	138	137	135	134	132	126	118	
CONF 3	143	142	141	139	137	136	135	133	127	119	

- 4) The nose wheel steering and the engine thrust are used to taxi the airplane.
  - 5) Make sure you have the necessary clearance when you go near a parked airplane or other structures.
  - 6) Set takeoff flaps to position CONF 3.
  - 7) When the APU in the taxi airplane or the parked airplane is on, you must have a minimum clearance of 50 feet between the APU exhaust port and the adjacent airplane's wingtip (fuel vent).
  - 8) The taxi speed must not be more than approximately 30 knots. Speeds more than 30 knots added to long taxi distances would cause heat to collect in the tires. Recommended speed is 20 knots. Beware of changing GS numbers due to tailwinds or headwinds during taxi.
  - 9) Before making a turn, decrease the speed of the airplane to a speed of approximately 8 to 12 knots. Make all turns at a slow taxi speed to prevent tire skids.
  - 10) When it is possible, complete the taxi in a straight-line roll for a minimum of 10 feet.
- NOTE: This will remove the torsional stresses in the landing gear components, and in the tires.

11) Make sure you know the taxi turning radius. **Caution: The A340-500/-600 is an extremely long aircraft. Take particular care of the wheelbase when turning.**



12) Monitor the wingtips and the horizontal stabilizer carefully for clearance with buildings, equipment, and other airplanes. With an **effective steering rate is 65.2 degrees**, a **minimum of 165.6 FT to perform a 180 degree turn is required** to clear the aircraft's wingtip.

13) When a left or right engine is used to help make a turn, use only the minimum power possible.

14) Do not let the airplane stop during a turn.

15) Do not use the brakes to help during a turn. When you use the brakes during a turn, they will cause the main and nose landing gear tires to wear.

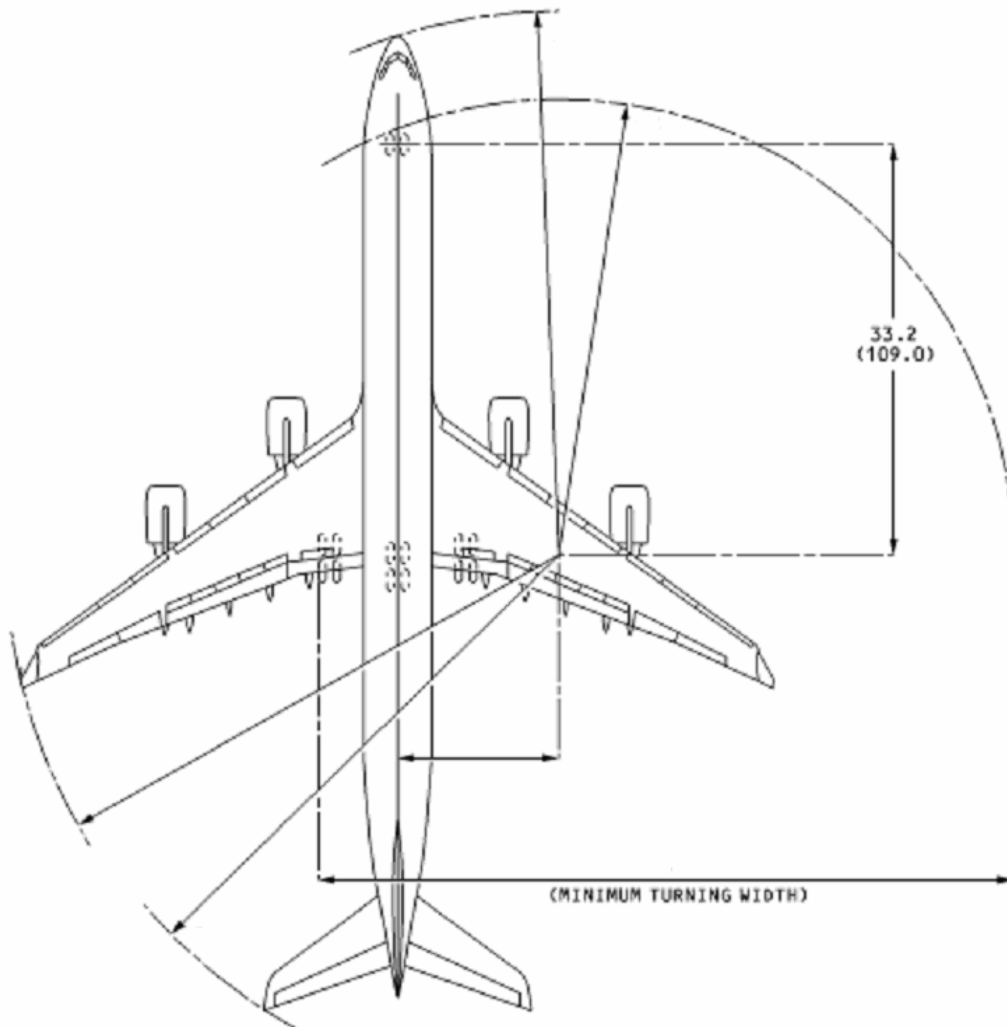
16) Use the Inertial Reference System (IRS) in the ground speed (GS) mode to monitor the taxi speed.

17) If the airplane taxi speed is too fast (with the engines at idle), operate the brakes slowly and smoothly for a short time. NOTE: This will decrease the taxi speed.

18) If the taxi speed increases again, operate the brakes as you did in the step before.

19) Always use the largest radius possible when you turn the airplane. NOTE: This will decrease the side loads on the landing gear, and the tire wear will be decreased.

20) Again, extra care must be given to turn the aircraft due to the fuselage length and wingspan. A minimum distance from the edge of the pavement must be maintained to reverse the aircraft's direction. Minimum pavement distance is 109 FT.:



21) Operate the brakes to stop the airplane.

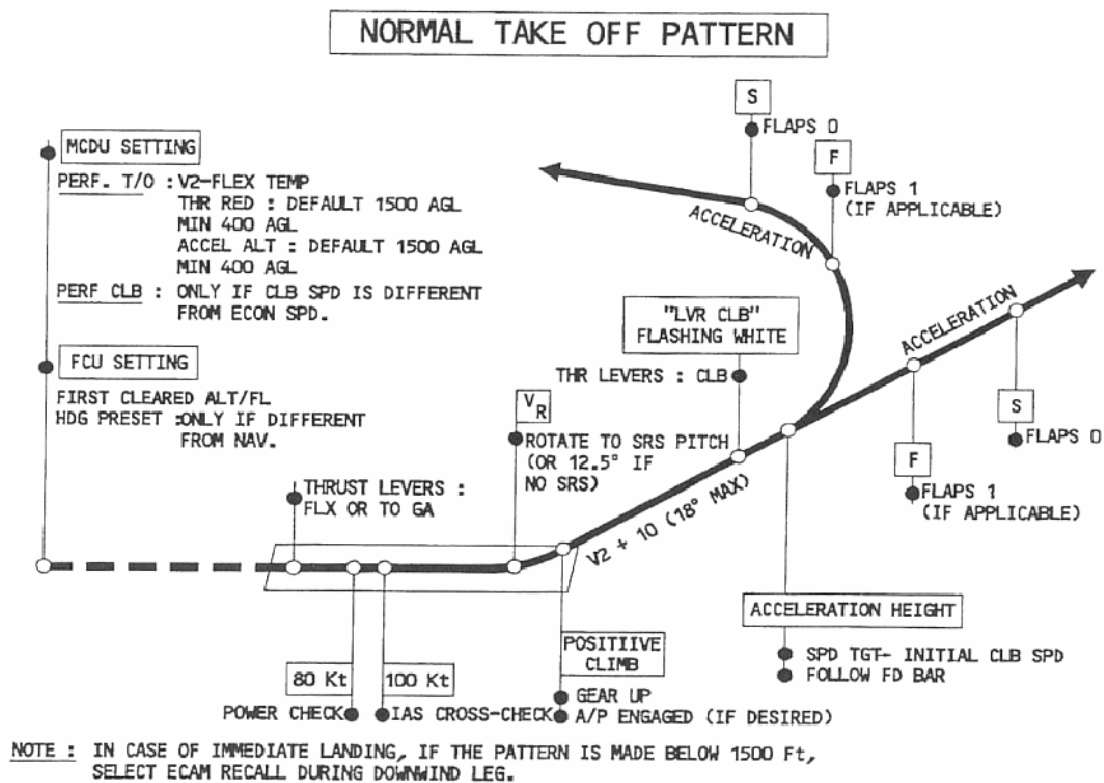
22) Set the parking brake after the airplane has stopped.



## TAKEOFF

- 1) Align aircraft with runway centerline.
- 2) Increase power smoothly to pre-determined takeoff or flex takeoff EPR (Exhaust Pressure Ratio) based on aircraft takeoff weight (max 1.40 EPR).
- 3) Flex T/O EPR thrust reduction must not exceed 40% of the full rated take-off thrust.
- 4) CLS recommends, for a given takeoff weight, to maximize payload, takeoff configuration, and thrust rating, use the minimum thrust setting and lowest V1 speed.
- 5) Verify that engines have stabilized.
- 6) Watch ECAM indicator for engine problems or aircraft alarms.
- 7) Increase power smoothly to pre-determined N1 speeds based on aircraft takeoff weight, (85% - 105% N1). This can either be done manually or using the autothrottle with the autopilot engaged.
- 8) At Vr, smoothly rotate aircraft 8 degrees upwards at a pitch rate of 2 – 3 degrees per second.  
**Caution: DO NOT rotate more than 10 degrees to avoid tail strike. Tail strike will occur at 14 degrees rotation.**
- 9) Hold nose at +10 degrees after positive rate of climb is confirmed, then raise landing gear after V2 (see below).
- 10) Set initial climbout speed to V2+15 KTS, 1500 fpm. **Caution: do not exceed 15 degrees of bank below 230 knots on initial climbout.**

- 11) Maintain +10 degrees climb to 1500 FT, or obstacle clearance, whichever is higher. +12-15 degrees climb after 1500 FT. **Caution: on heavy climbout, lower nose as necessary to gain airspeed. Beware of terrain:**



- 12) At 1500 FT above field elevation, begin slat retraction per retraction table. Maximum slat speed limits are:

Slat Position	Max Speed
CONF 1	280 knots
CONF 1+F	233 knots
CONF 2	216
CONF 3	206
FULL	200

- 13) Increase speed to 230 – 250 in accordance with ATC instructions (max 250 KTS below 10,000 FT).
- 14) For full maneuverability beneath 10,000 FT, slats must be fully retracted with aircraft at minimum safe airspeed.

## CLIMB

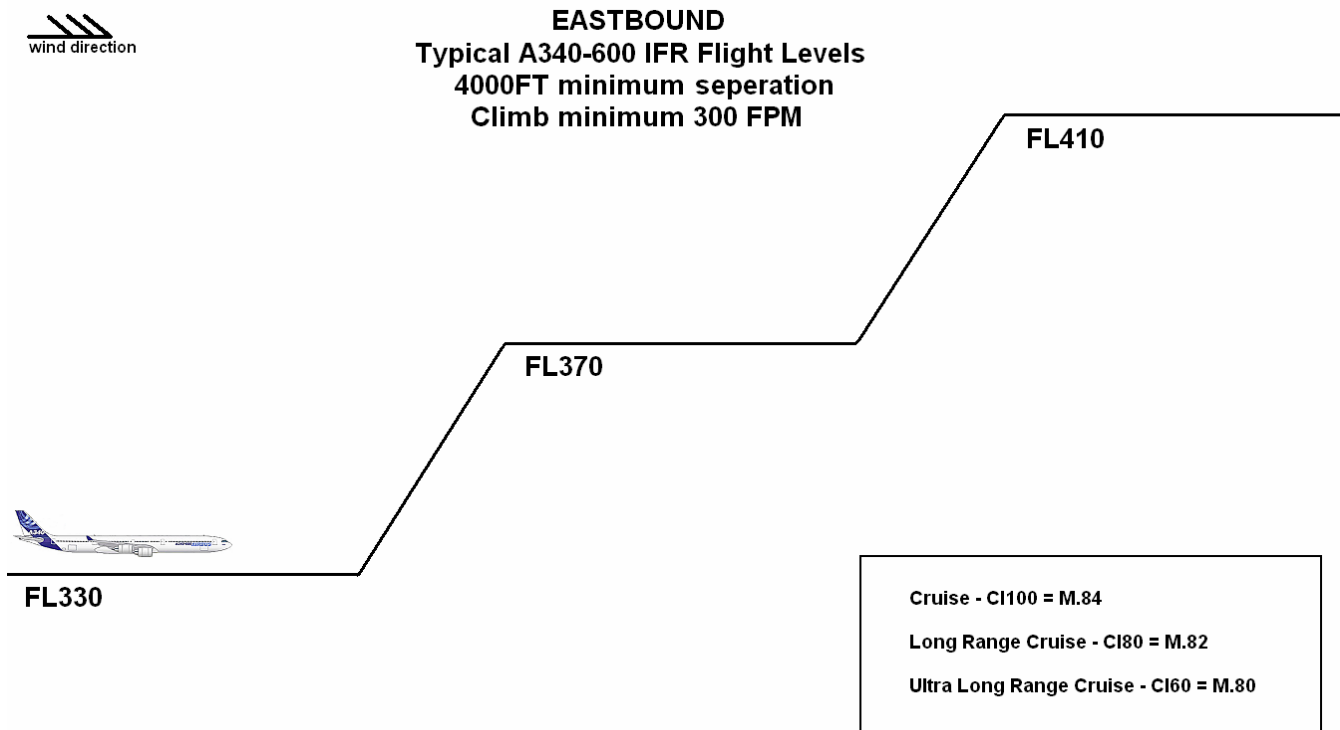
- 1) Select highest FLEX N1 setting. Once climb thrust or airspeed is set, the autopilot will compensate for environmental condition changes automatically during the climb.
- 2) It is recommended that the aircraft be flown manually up to 15,000 FT, weather and ATC traffic conditions permitting. However, in high traffic conditions, to ease the workload of the pilot, the autopilot MCDU altitude intervention may be engaged above a minimum altitude of 80 FT with the landing gear up.
- 3) Climb settings use a 10 – 20% derate of thrust up to 10,000 FT, then increases linearly to max thrust at 30,000 FT.
- 4) For **enroute climb**, climb at a rate of 1800 - 2300 FPM, pursuant to ATC and traffic conditions. If there are no altitude or airspeed restrictions, accelerate to the recommended speed. The sooner the aircraft can be accelerated to the proper climb speed, the more fuel and time efficient the flight.
- 5) As **engine and wing icing** may occur during the climb and descent, the engine anti-icing system should be in the AUTO or ON position whenever icing is possible. NOTE: Failure to do so may result in engine stall, overheating, or engine damage.
- 6) **For normal economy climb**, follow ATC speed restrictions of 250 KTS below 10,000 FT. If permitted by ATC and no speed restriction below 10,000 FT, increase speed to 280 KTS. Above 10,000 FT, climb at 300 KTS or .84 MACH. Climb speed table is as follows:

ALTITUDE	SPEED
Sea Level to 10,000 FT	250 KTS
Above 10,000 FT	300 KTS/.840 MACH

- 7) **Max climb speed** is 300 knots until reaching .840 MACH at initial cruise altitude.
- 8) **For engine out climb**, speed and performance various with gross weight and altitude, however 260 knots at 1000 – 1500 FPM may be used.
- 9) Set **standard barometer** above airport transition level (depends on local airport geography).

## CRUISE

- 1) **Cruise** at .84 MACH (normal cruise), .82 MACH (long-range cruise), or .80 MACH (ultra long range cruise).
- 2) **Step climb** typically in 4000 FT minimum intervals, minimum 300 FPM climb. Step climb examples below:





**WESTBOUND**  
**Typical A340-600 IFR Flight Levels**  
**4000FT minimum separation**  
**Climb minimum 300 FPM**

FL390

FL350

FL310



Cruise - CI100 = M.84

Long Range Cruise - CI80 = M.82

Ultra Long Range Cruise - CI60 = M.80

- 3) **Headwinds** will increase engine power, reduce cruise speed and decrease range.
- 4) **Tailwinds** will decrease engine power, increase cruise speed and increase range.
- 5) Follow previously entered **FCU waypoints**.
- 6) **Fuel Freeze** -- Extended operation at cruise altitude will lower fuel temperature. Fuel cools at a rate of 3 degrees C per hour, with a max of 12 degrees C in extreme conditions. Fuel temperatures tend to follow TAT (total air temperature). To raise fuel temperature/TAT, a combination of factors can be employed:
  - Descend into warmer air.
  - Deviate to warmer air.
  - Increase Mach speed.

An increase of 0.01 MACH will increase TAT by 0.5 – 0.7 degrees C.
- 7) **Increased fuel burn** can result from:
  - High TAT
  - Lower cruiser altitude than originally planned.
  - More than 2,000 FT above the optimum calculated altitude.
  - Speed faster or slower than .84 MACH cruise.
  - Strong headwind.
  - Unbalanced fuel.
  - Improper aircraft trim.



8) **Fuel penalties** are:

- 2000 FT above optimum – 3 percent increase in fuel usage
- 4000 FT below optimum – 5 percent increase in fuel usage
- 8000 FT below optimum –12 percent increase in fuel usage
- M.01 above M.84 – 3 percent increase in fuel usage
- Higher climb rates, 3000 fpm over 29,000 – increased fuel usage

9) **While performing step climb cruise, select the optimum altitude** for the aircraft weight, outside air temperature, and wind conditions (conversion key: 1 LB = 2.2 KG):

**OPTIMUM WEIGHT FOR 4000 FEET STEP CLIMB**

STEP CLIMB FROM/TO	WEIGHT (1,000 KG)											
	ISA				ISA + 10				ISA + 20			
	LR	M.80	M.82	M.84	LR	M.80	M.82	M.84	LR	M.80	M.82	M.84
310/350	340	320	340	320	340	320	340	320	320	320	320	300
330/370	300	300	300	280	300	300	300	280	280	280	280	260
350/390	280	260	280	260	280	260	280	260	260	240	240	240
370/410	240	240	240	240	240	240	240	240	220	220	220	200

10) In the case of **engine out cruise**, it may be necessary to descend. NOTE: For engine failure, divert to the nearest available airfield to avoid overstressing engines and unnecessary risk. Use good judgement to select an airfield that can accommodate an aircraft of this size. Consideration must also be giving to ground facilities to accommodate number of passengers on board.

11) Trim aircraft for proper elevator alignment.

12) In case of engine out cruise, trim rudder for directional alignment.

13) Deviate from flight plan for weather, turbulence, or traffic as necessary after receiving clearance from ATC.

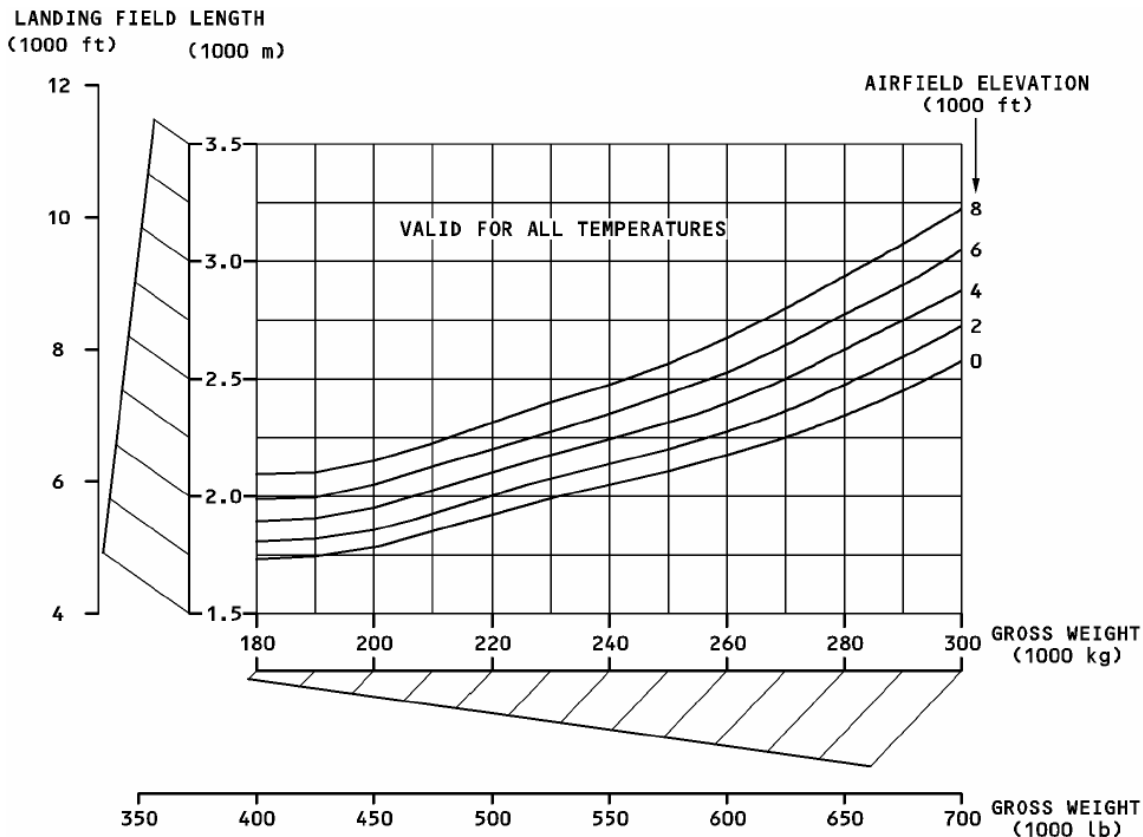
## DESCENT

- 1) Descent at pre-determined TOD (Top of Decent)
- 2) Descend at 300 KT above 10,000 FT.
- 3) Use speedbrakes or thrust to minimize vertical path error.
- 4) Proper descent planning is necessary to ensure proper speed and altitude at the arrival point. Distance required for descent is 3NM/1000FT. Descent rates are as follows:

Intended Speed	Decent Rate	
	CLEAN	WITH SPEEDBRAKES
.840 MACH/300 KTS	2500 FPM	5500 FPM
250 KTS	1400 FPM	3500 FPM
VREF 30 + 80 KTS	1100 FPM	2400 FPM

- 5) Plan to descend so that aircraft is at approximately 10,000 FT above ground level, 250 KTS, 30 miles from airport.
- 6) At average gross weights, it requires 60 seconds and 5 NMs to decelerate from 300 KTS to 250 KTS for level flight without use of the speedbrakes during level flight. It requires 110 seconds to slow from 300 KTS to minimum clean airspeed. Using speedbrakes will reduce the times and distances by half.
- 7) Arm speedbrakes and autobraking to position Low or Med on initial descent.
- 8) Set airport altimeter below transition level.
- 9) Avoid using the landing gear for drag above 180-200 KTS to avoid damage to doors or passenger discomfort due to buffeting.
- 10) **Recommended approach planning**, ATC and airport rules permitting:
  - 250 KTS below 10,000 FT, 30 miles from airport.
  - 180-230 KTS, 23 miles from airport.
  - Slow to VREF at GS capture.
  - VREF, 5 – 7 miles from airport.
- 11) **In case of rapid descend due to depressurization**, bring aircraft down to a safe altitude as smoothly as possible. Using the autopilot is recommended. Check for structural damage. Avoid high load maneuvering.

- 12) **Stall recovery** can be accomplished by lowering the aircraft's nose and increasing power at once to gain airspeed. Beware of terrain. Accelerate to VREF 30 + 80 KTS. Do not retract gear until confirmed stall recovery and positive rate of climb. Keep nose at 5 degrees above the horizon or less.
- 13) If deployed, do not retract slats during the recovery, as it will result in altitude loss.
- 14) In the event of engine out approach, approach at VREF+5 @ flaps position 3.
- 15) Determine the aircraft required runway length based on the gross weight. **<NOTE> At Maximum Design Landing Weight, the A340-600 requires minimum 5,800 FT runway to stop:**

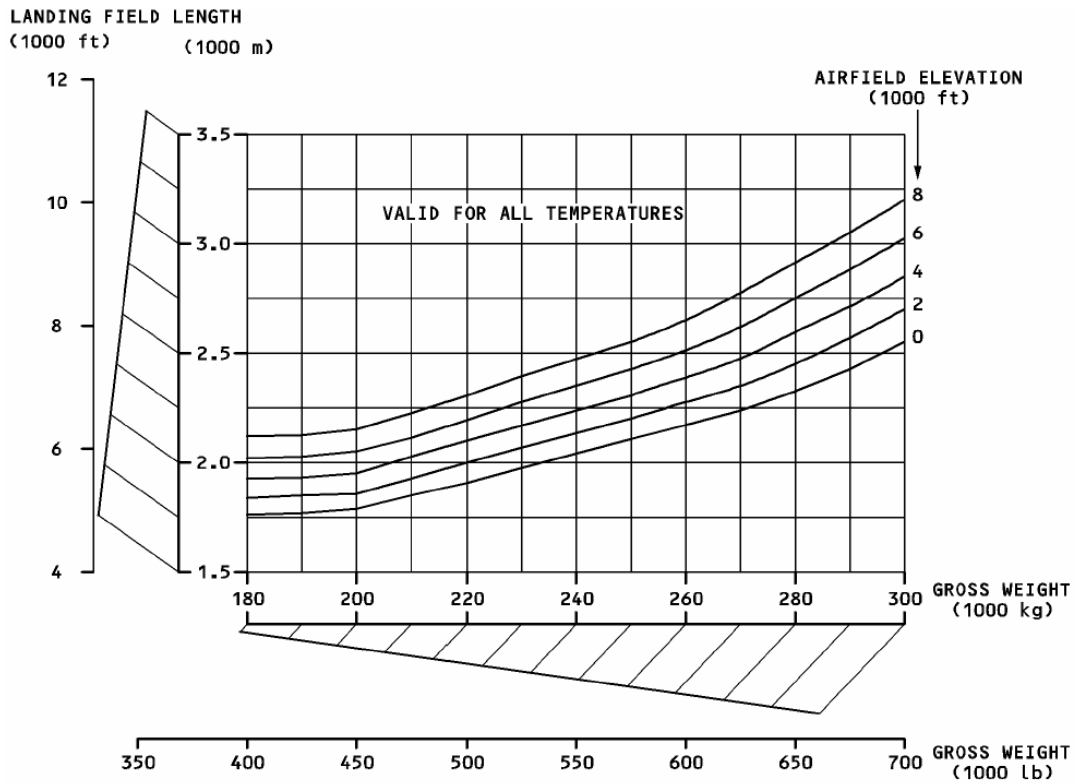


FAR/JAR Landing Field Length  
RB 211 TRENT 556 Engines  
A340-600 Model

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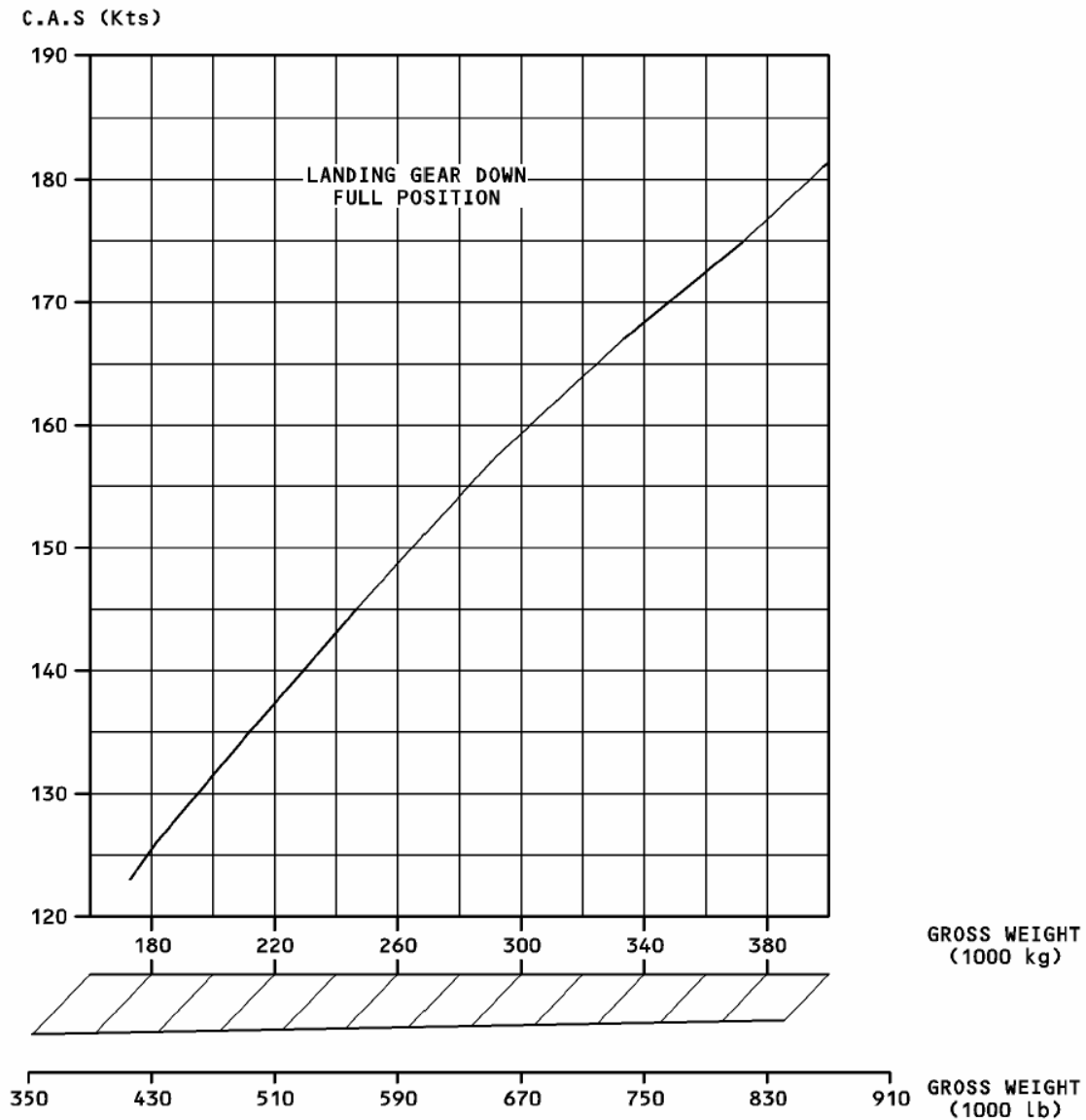
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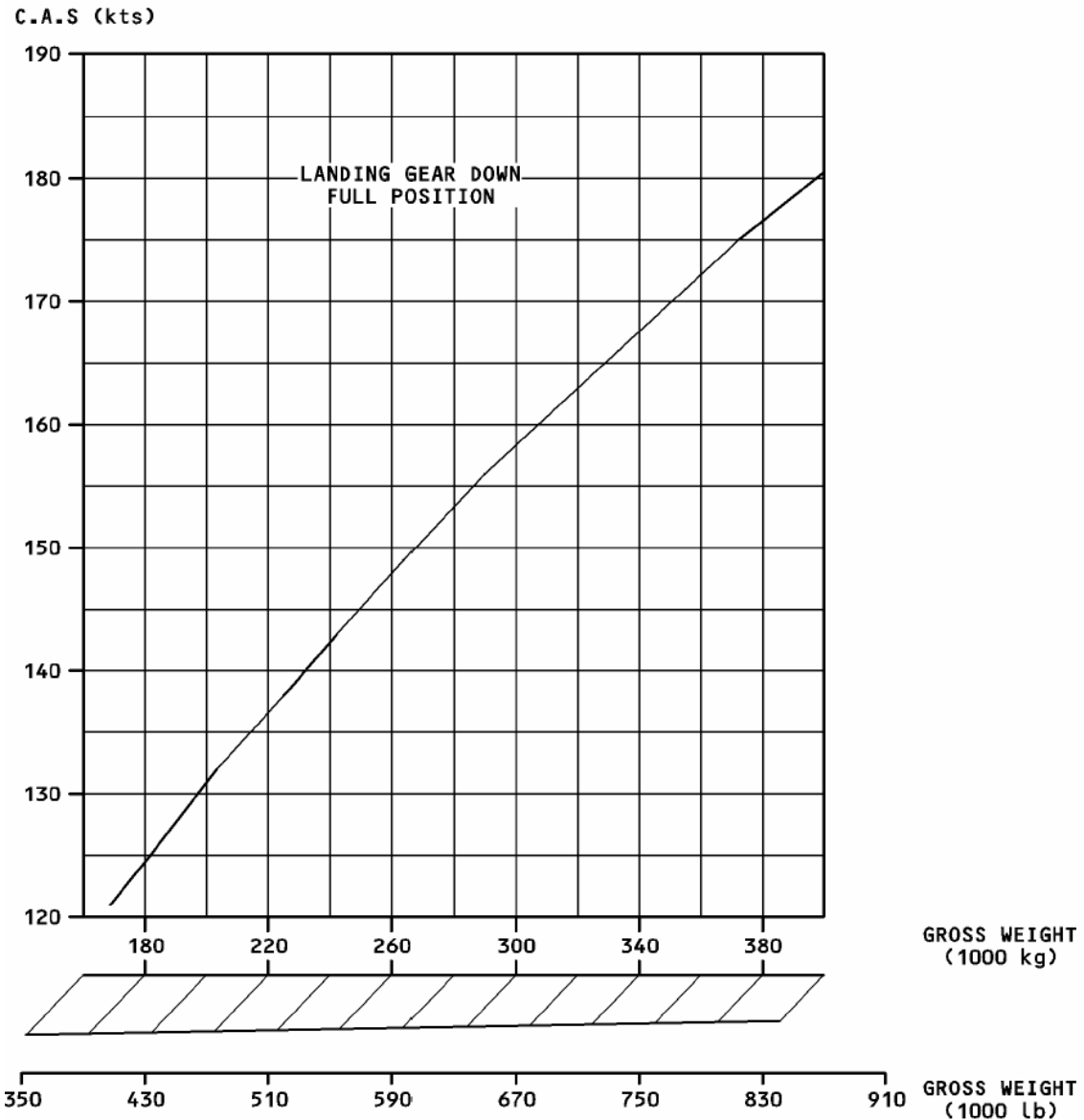


FAR/JAR Landing Field Length  
RB 211 TRENT 553 Engines  
A340-500 Model

- 16) Under normal conditions land at VREF @ flaps position 4. Final approach speeds for the A340-600 are as follows. **Be certain to add the aircraft wind component** to eliminate excessive nose positive pitch upwards:

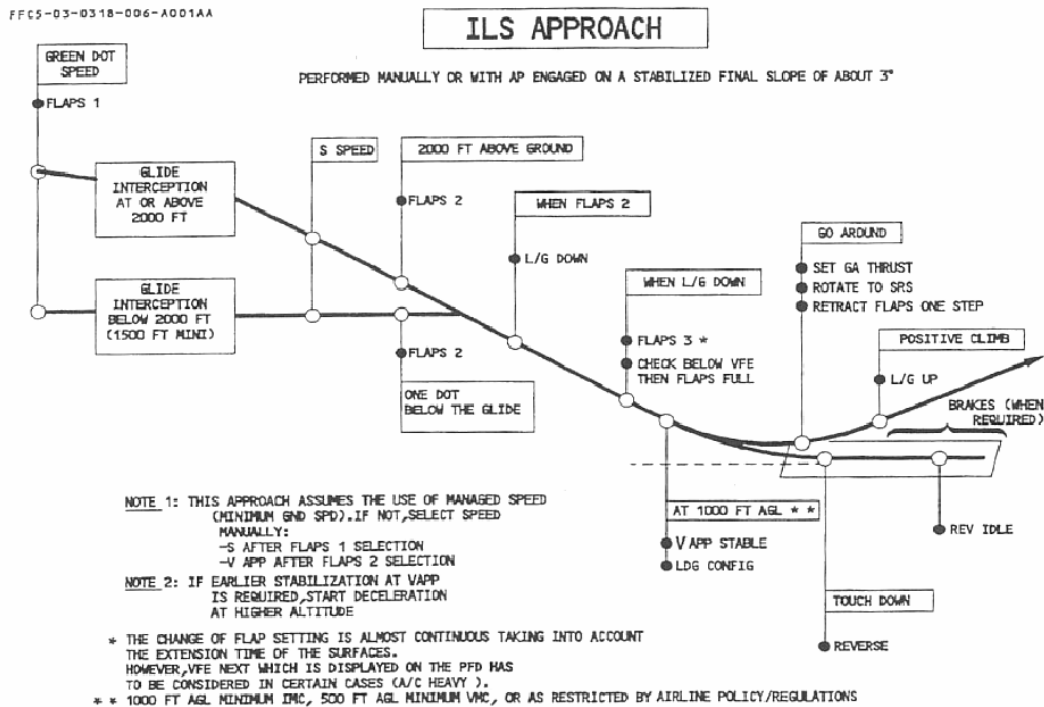


Final Approach Speed  
RB 211 TRENT 556 Engines  
A340-600 Model



Final Approach Speed  
RB 211 TRENT 553 Engines  
A340-500 Model

- 17) **ILS Approach** - During initial maneuvering for the approach, extend flaps to position 1 and slow to 180-200kts. When the localizer is alive, extend flaps to 2 and maintain speed, keep at 180 knots. **At glideslope intercept, extend the landing gear, extend flaps to 4 and slow to  $V_{ref} + 5$ .** Be stabilized by 1000 feet above field level. This means, gear down, flaps 4,  $V_{ref} + 5$  and engines spooled. Plan to cross the runway threshold at  $V_{ref}$ . The A340 will maintain nose up angle of +4 degrees.



- 18) **Visual Approach** - Similar to the ILS approach. The major difference is that aircraft must be stabilized by 500 feet above field level, as opposed to 1000 feet.

- 19) A stabilized approach at  $V_{ref} +5$  will result in a pitch attitude of 2-3 degrees nose up. Cross the threshold at  $V_{ref}$ . If flaring, begin the landing flare at about 30ft. Only about 1-2 degrees of pitch up is necessary. The tail will strike at approximately 14 degrees. Slowly reduce thrust to nearly idle. Landing with thrust at idle will result in a firm touchdown. Set thrust just above idle. At touchdown, fly the nosewheel on. At touchdown, autospoilers should deploy. Deploy reverse thrust. Normally, autobrakes Low position is sufficient stopping power. Med is sufficient for short or wet runways. Be out of reverse thrust by 80kts to prevent foreign object damage to the engines.
- 20) For **wind correction**, add  $\frac{1}{2}$  the steady state wind plus all of the gust factor to the  $V_{ref}$ . Do not add more than 20 kts. When landing in a crosswind, do not bank excessively as wingtip or engine pod strike may occur.
- 21) The Commercial Level Simulations A340 is a CATII/III aircraft, meaning the aircraft is capable of landing on autopilot in conditions where visibility is down to 50ft AGL.
- 22) Land the aircraft. **To avoid tail strike, do not flare, flying the aircraft straight onto the runway.**
- 23) Disengage (autopilot autothrottle will disengage) reverse thrust at 80 knots.
- 24) Disengage autobraking at 60 knots or as necessary.
- 25) Turn off onto high-speed taxiways at 30 knots or less.
- 26) Reverse thrust is most effective at higher speeds. Slow to safe taxi speed with braking and exit the runway.
- 27) Decelerate to 8 – 12 knots for 90 degree turns.
- 28) Taxi to gate.



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## Commercial Level Simulations A340-600 – Frequently Asked Questions



### **Q) Climbout seems a bit slow when heavy... Am I doing this right?**

A) After vR, rotate the nose upwards smoothly. Avoid over-rotation. When the wheels are off the ground, raise the landing gear as soon as reasonably possible to gain airspeed. Hold max 1500 fpm until 1500' AGL. Lower the nose as necessary to gain airspeed. The A340 will climb, however, speed is crucial. If terrain permits, do not sacrifice airspeed for altitude. The Trent 556 A340-600s will accelerate slower than the Trent 560 due to the difference of 16,000 lbs total less thrust.

**Q) So what's a typical climb profile like for an A340-600?**

A) Climb to 1500 fpm to 1500' AGL, then accelerate to 250 knots (or ATC restriction) @ 1800 FPM. Pulling sharply on the flight stick will result in rapid airspeed loss from bleeding airspeed. Above 10,000' feet, accelerate to 300 knots, 1800 fpm. When heavy, drop to 1300 fpm or 800 fpm near the top of the climb over FL280. Initial flight level when heavy should be in the neighborhood of FL330, climbing at 300 FPM. Step climb to final cruise altitude as weight permits.

**Q) Doesn't 300 FPM climb seem really slow for a large aircraft with 4 engines?**

A) The A340-600 weights more than 804,000 lbs from it's MTOW. The Airbus documentation is filled with minimum 300 FPM climb charts.

**Q) I can't get the hang of this climbout profile, or this 300 FPM climb. I just want to fly without realistic performance. What can I do?**

A) Although we strive for the most realistic performance possible, we realize that some customers simply want to fly without wanting to fuel plan, or step climb. Please use the A340-600 EZ flight dynamics engine which is included with this package.





**Q) Nose angle seems high on landing? Different than Boeings. Is this correct?**

A) Yes, Airbuses are more angled on approach, where Boeing aircraft are more flat. Verify your trim and landing weight, however, you should see about +3 - +4 degrees nose up. Fly straight at the glideslope intercept at about 180 – 190 knots. At intercept, lower the landing gear and extend to flaps 4. The A340 will maintain about 4 degrees nose up attitude. If you are seeing more than this, adjust your trim.

**Q) Should I flare on landing?**

A) To avoid tail strike, it is recommended to fly the aircraft straight onto the runway.



**Q) Why is there no 53,000 lb thrust Trent 500 FDE?**

A) According to our A340-600 pilot, we were told to remove that FDE as the 53,000 lb Trents were only temporary.

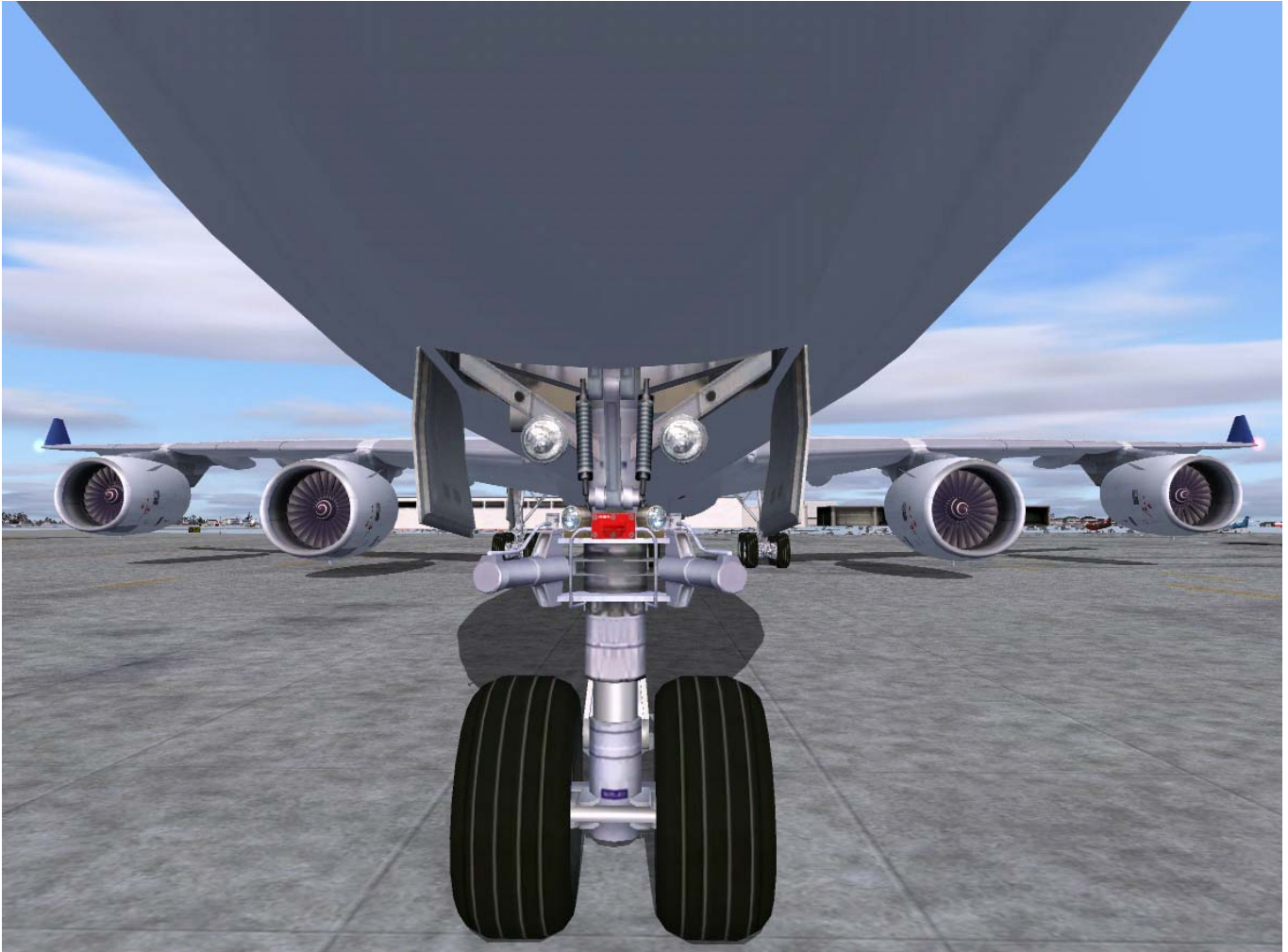
**Q) What is with all the red dots on the physical diagram?**

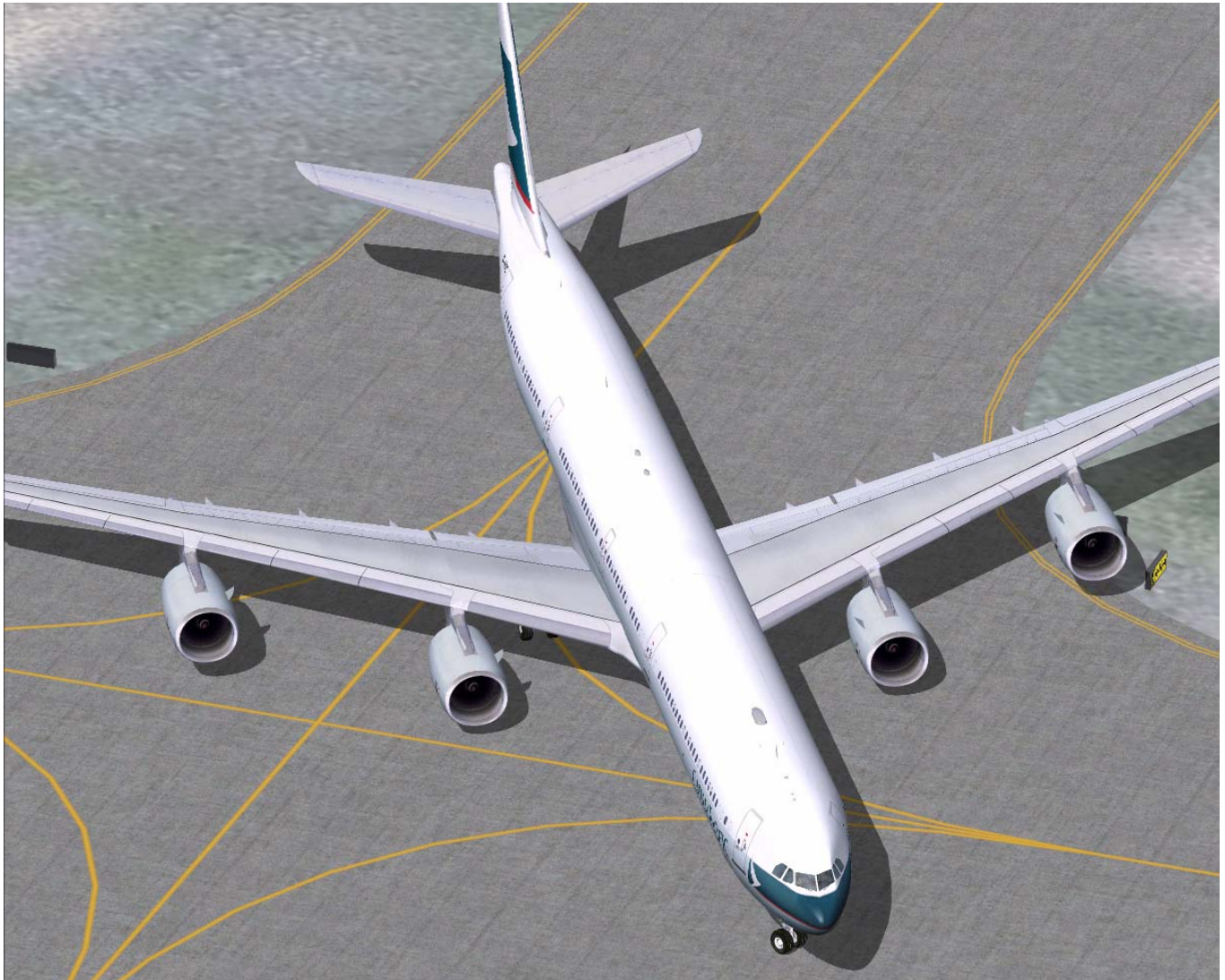
A) The A340-600 has more than 60 individual scrape points and damage profiles throughout the aircraft. If you strike a part, or damage a surface, you will know about it.



**Q) Does the A340-600 use the true Airbus landing gear footprint?**

A) Yes, with an effective steering rate of 65.2 degrees, all 14 wheels and tires are modeled for the A340-600. Auto-braking and Auto-spoiler popup deployment work properly (if set).





**Q) I find it hard to taxi the A340-600. How do I keep her off the grass or out the mud?**

A) Taxiing is easy. Just remember the plane has a very long wheelbase. Simply taxi past your turning point, remembering the main landing gear and the nose gear are far behind you. Then, swing the plane around to line up on the taxiway or runway.

In extremely tight turns, it's not uncommon for the pilots in the flight deck to hang over the grass, past the taxiway with the nose gear still on the pavement.

**Q) Why sometimes only 2 or 3 of the 4 inspection lights on the engines work?**

A) Go to your FS settings -> display -> hardware settings. Please make sure your "Hardware rendered lights" level is set to 6 or higher. Please note any changes take affect after restarting FS2004.

**From CLS, thank you for your support!!!**

