

OCTOBER 2017

APPLICABLE LEGAL FRAMEWORK AT PARIS-CHARLES DE GAULLE AIRPORT IN ORDER TO PREVENT AIR NOISE POLLUTION



Ministry for an ecological and solidary transition

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WATCH OUT

This guide provides a synthetic overview of all environmental measures applicable at Paris-Charles de Gaulle airport to prevent noise pollution.

For complete guidance, please refer to legal requirements and to the aerodrome's aeronautical information www.sia.aviation-civile.gouv.fr.

Authorisations from ATC only take into account flights security and do not prejudice the compliance with the environmental regulations. Respecting those rules comes under the responsibility of the aircraft manager and the captain.

FOR THE RECORD

Noise abatement procedures taken to reduce aircraft's noise enter into the balanced approach principle developed by the ICAO and based on the four following elements:

1. Reduction of noise at source
2. Land-use planning and management
3. Noise abatement operational procedures
4. **Operating restrictions on aircraft**

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RESTRICTIONS FOR USE BY NIGHT AND DAY

AIRCRAFT'S SOUND PERFORMANCES

(MODIFIED DECREE OF THE 20TH SEPTEMBER 2011)

Aircraft in compliance with standards as per annex 16 of the convention relative to international civil aviation of the 7th December 1944, volume 1, 2nd part, **chapter 2, are banned.**

Aircraft in compliance with standards as per annex 16 of the convention relative to international civil aviation of the 7th December 1944, volume 1, 2nd part, **chapter 3 with an accumulated margin less than 5 EPNdB are banned.**

Possible exceptions:

- aircraft carrying out sanitary or humanitarian missions;
- military aircraft and aircraft belonging to the State and exclusively affected to a public utility;
- aircraft carrying out governmental flights;
- aircraft in emergency situation relating to flight safety or pax safety reasons.

VOLUME OF ENVIRONMENTAL PROTECTION (VPE)

(DECREE OF THE 18TH FEBRUARY 2003)

A volume of environmental protection is a volume of airspace linked to a departure or arrival procedure made known to users through the aeronautical information channel, within which a flight is to be contained for environmental reasons. **Aircraft can enter or leave those volumes only through defined "entering" and "exit" limits.**

Those volumes are mandatory for jet engine aircraft. No aircraft commander shall derogate from those rules except when he evaluates it to be absolutely necessary, on grounds of safety or when fresh control instruction is received from ATC agency on grounds of flight safety assurance.

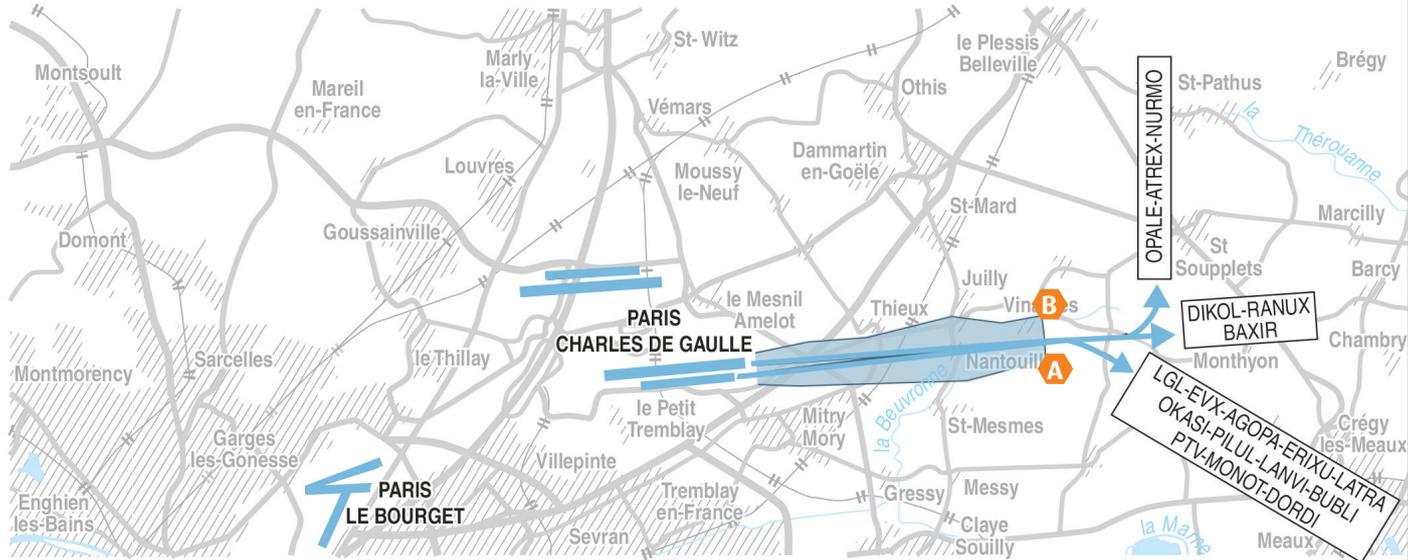
In order to get the exact coordinates of the VPE, please refer to the Paris-CDG aeronautical information publication.

The volumes of environmental protection are also mandatory for propeller aircraft between **11.16 pm and 5.59 am.**



VOLUME OF ENVIRONMENTAL PROTECTION - DEPARTURES

PARIS CHARLES DE GAULLE ENVIRONMENT PROTECTION AIRSPACE INITIAL DEPARTURES RWY 08

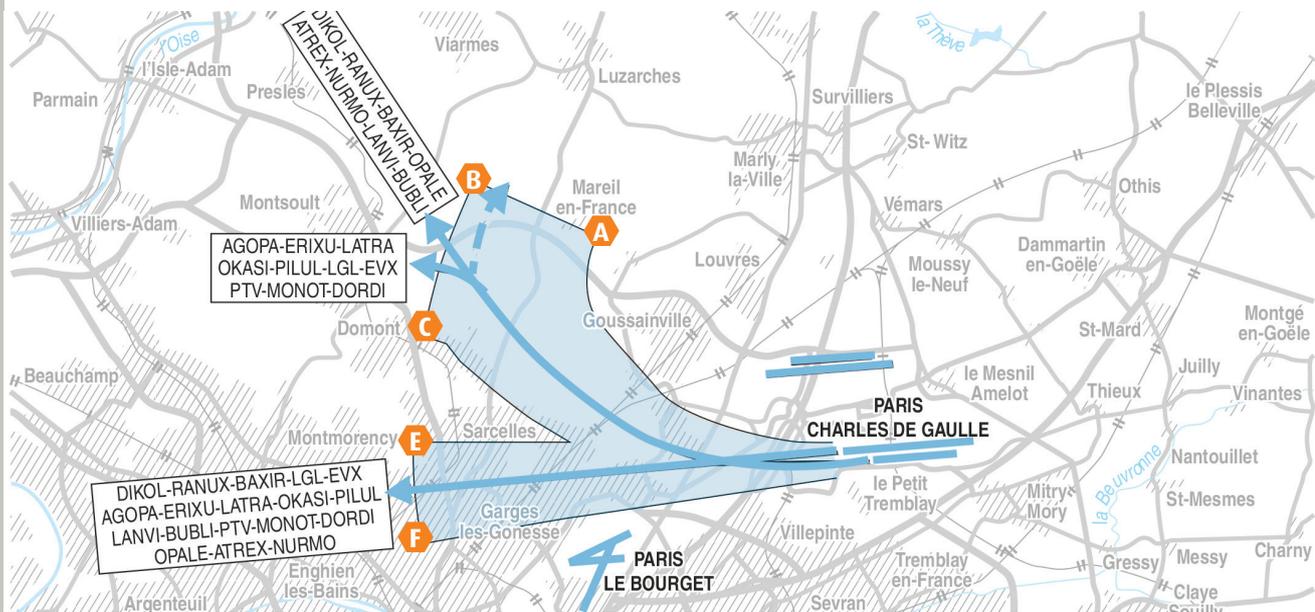


EXIT LIMIT 08 lateral limit located between the points A: 48°59'56.01"N, 002°44'26.05"E
B: 49°00'44.69"N, 002°44'20.11"E



VOLUME OF ENVIRONMENTAL PROTECTION - DEPARTURES

PARIS CHARLES DE GAULLE ENVIRONMENT PROTECTION AIRSPACE INITIAL DEPARTURES RWY 26



EXIT LIMITS 26

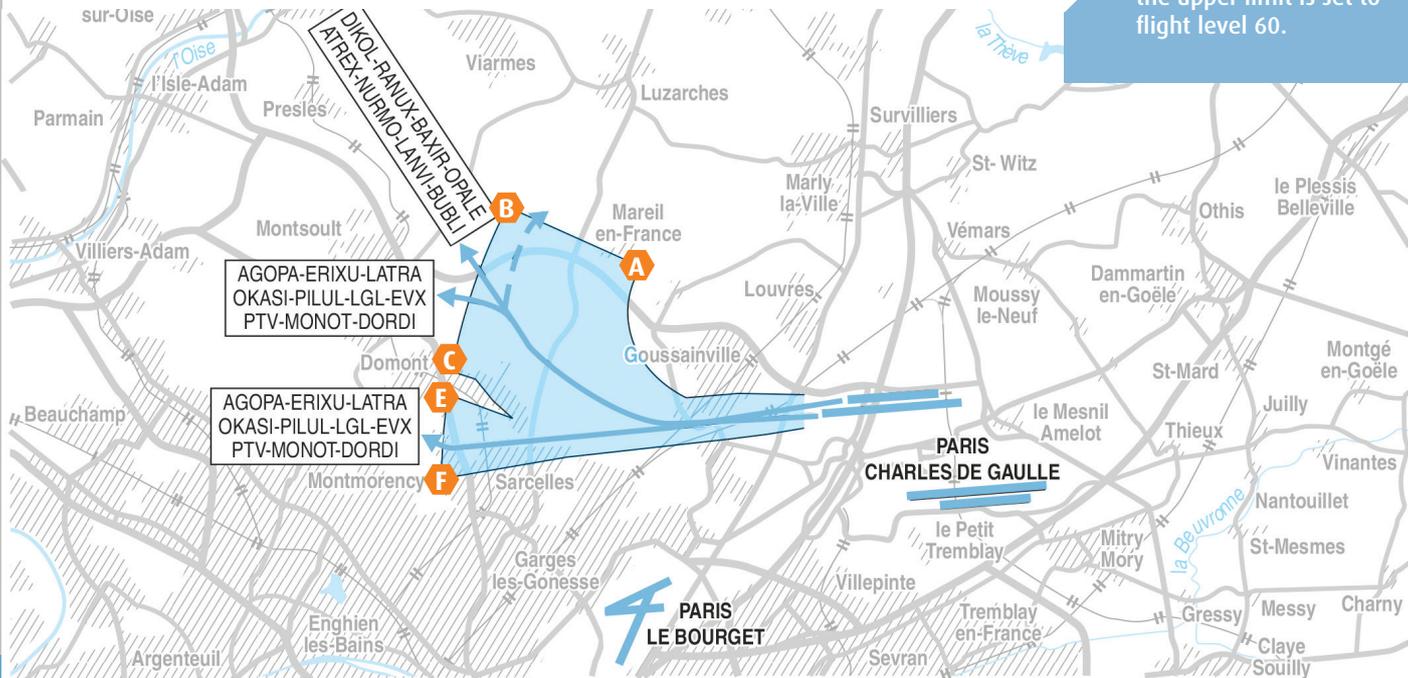
Lateral limit located between the points A: 49°03'50.55"N, 002°25'59.58"E Lateral limit located between the points E: 49°00'01.37"N, 002°20'43.36"E
 B: 49°04'54.02"N, 002°22'29.17"E F: 48°58'06.82"N, 002°20'58.03"E
 C: 49°02'00.48"N, 002°21'00.42"E



VOLUME OF ENVIRONMENTAL PROTECTION - DEPARTURES

PARIS CHARLES DE GAULLE ENVIRONMENT PROTECTION AIRSPACE INITIAL DEPARTURES RWY 27

For each volume above, the lower vertical limit is defined by a 5.5% slope from the runway end side; the upper limit is set to flight level 60.



AGOPA-ERIXU-LATRA
OKASI-PILUL-LGL-EVX
PTV-MONOT-DORDI

AGOPA-ERIXU-LATRA
OKASI-PILUL-LGL-EVX
PTV-MONOT-DORDI

DIKOL-PANUX-BAYR-ORPLE
ATPEX-NURMO-LANI-BUBLI

EXIT LIMITS 27

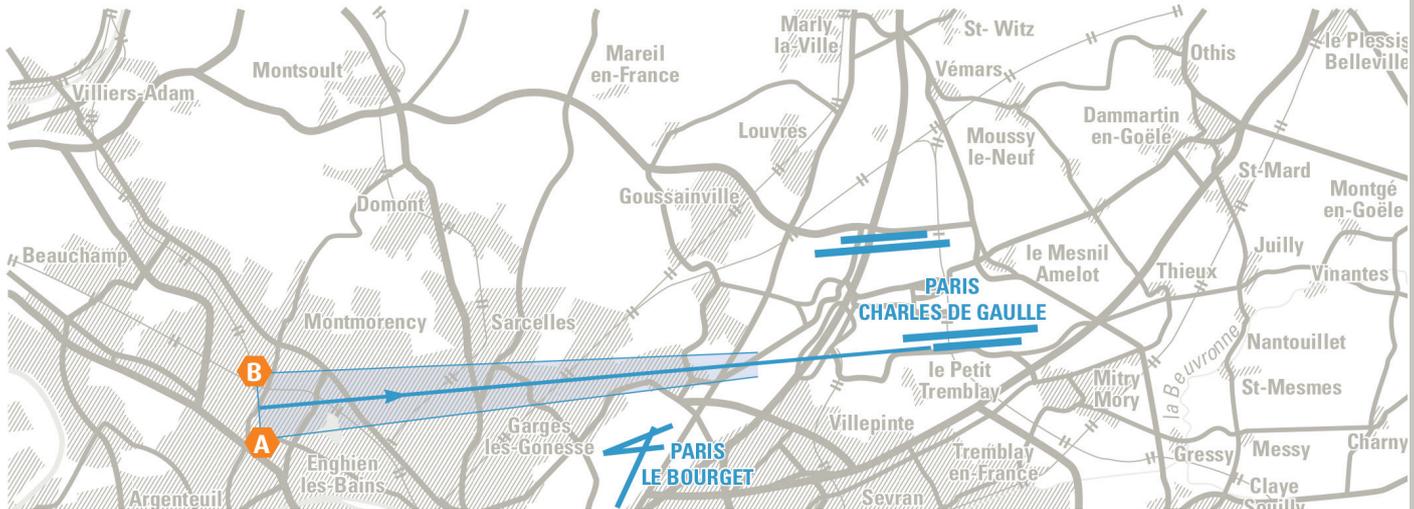
Lateral limit located between the points A: 49°03'50.55"N, 002°25'59.58"E
 B: 49°04'54.02"N, 002°22'29.17"E
 C: 49°02'00.48"N, 002°21'00.42"E

Lateral limit located between the points E: 49°01'37.16"N, 002°20'54.45"E
 F: 49°00'08.62"N, 002°20'43.45"E



VOLUME OF ENVIRONMENTAL PROTECTION - ARRIVALS

PARIS CHARLES DE GAULLE
ENVIRONMENT PROTECTION AIRSPACE
ARRIVALS ILS RWY 08R



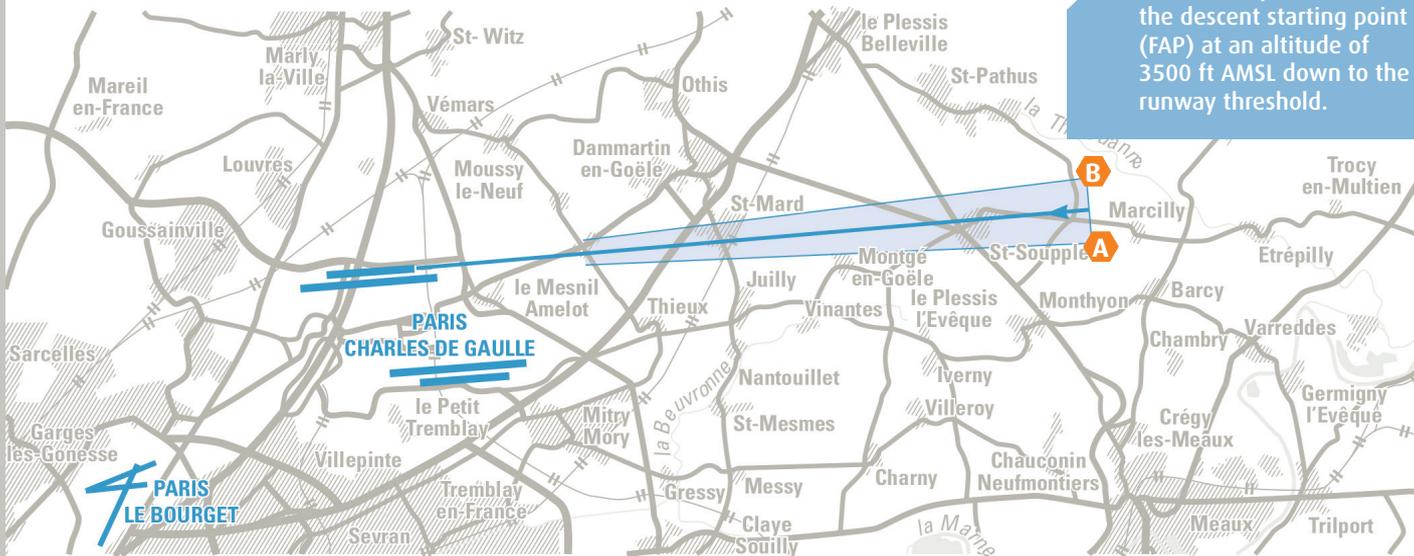
ENTRY LIMIT 08R Lateral limit located between the points A: $48^{\circ}58'01.51''N$, $002^{\circ}16'10.03''E$
B: $48^{\circ}59'10.13''N$, $002^{\circ}16'01.15''E$



VOLUME OF ENVIRONMENTAL PROTECTION - ARRIVALS

PARIS CHARLES DE GAULLE ENVIRONMENT PROTECTION AIRSPACE ARRIVALS ILS RWY 27R

For each volume above, the lower vertical limit is first set to 3500 ft AMSL, and then is defined by an inclined plane from the descent starting point (FAP) at an altitude of 3500 ft AMSL down to the runway threshold.

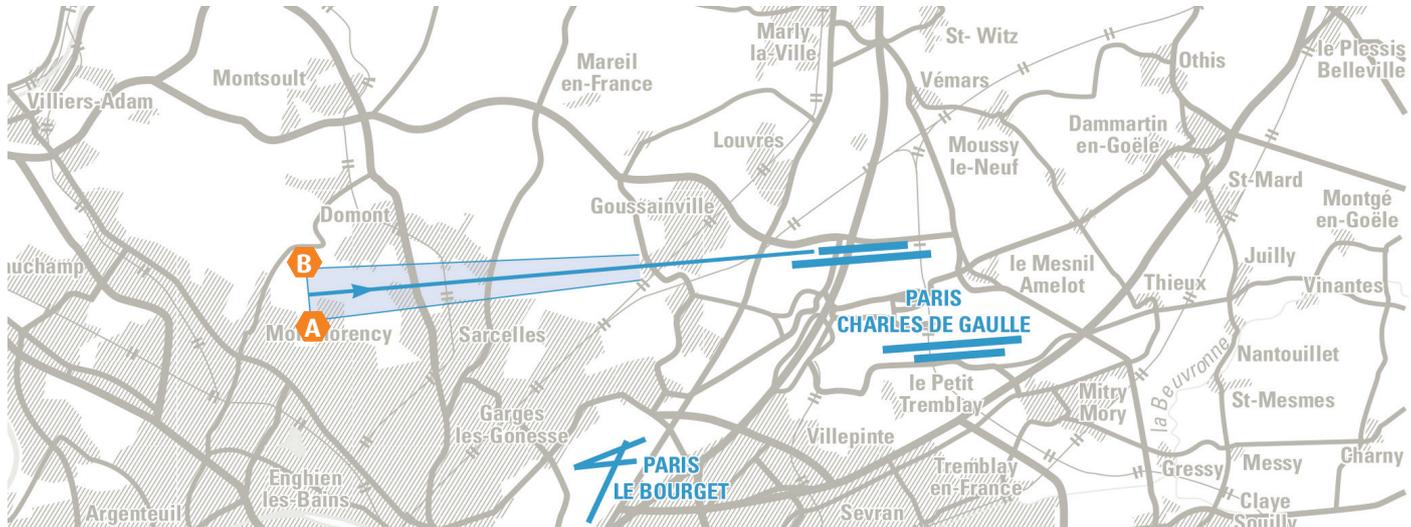


ENTRY LIMIT 27R Lateral limit located between the points A: 49°01'55.31"N, 002°50'08.93"E
B: 49°02'59.91"N, 002°50'01.27"E



VOLUME OF ENVIRONMENTAL PROTECTION - ARRIVALS

PARIS CHARLES DE GAULLE
ENVIRONMENT PROTECTION AIRSPACE
ARRIVALS ILS RWY 09L



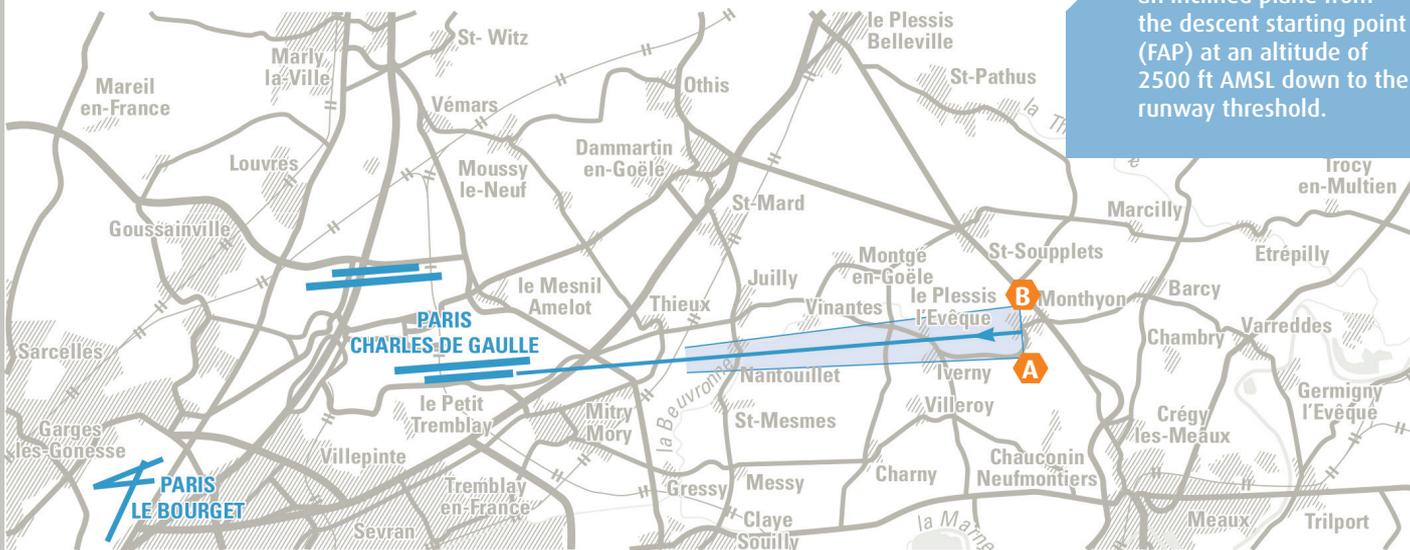
ENTRY LIMIT 09L Lateral limit located between the points A: 49°00'19.01"N, 002°18'23.95"E
B: 49°01'12.51"N, 002°18'17.06"E



VOLUME OF ENVIRONMENTAL PROTECTION - ARRIVALS

**PARIS CHARLES DE GAULLE
ENVIRONMENT PROTECTION AIRSPACE
ARRIVALS ILS RWY 26L**

For each volume above, the lower vertical limit is first set to 2500 ft AMSL, and then is defined by an inclined plane from the descent starting point (FAP) at an altitude of 2500 ft AMSL down to the runway threshold.



ENTRY LIMIT 26L Lateral limit located between the points A: 48°59'54.50"N, 002°48'24.58"E
B: 49°00'45.36"N, 002°48'18.53"E



OPERATIONAL RESTRICTIONS

OPERATIONAL PROCEDURES FOR TAKE-OFF (MODIFIED DECREE OF THE 20TH SEPTEMBER 2011)

Generally speaking, pilots are to conduct their flight (in accordance with the operational standards to be applied to each aircraft) in order to reach 3000 ft AAL as fast as practicable.

Pilots of turbo engines are besides to comply with the initial climb procedures as follows:

- maintain speed V_2+10 (or the speed that allows to maintain flight altitude according to the type of aircraft) until a height of 3000 ft proceeding a wing flap deflection in accordance with the take-off configuration;
- maintain take-off power until 1500 ft and then maximum climb power rating up to 3000 ft;
- at 3000 ft proceed normal climbing power and flap retraction and then adopt climb attitude.

Besides, westbound take-offs in line with the runway can only be made by aircraft belonging to chapter 3, and these aircraft must maintain a **minimum climb gradient of 6.5%**.

OBLIGATION TO FOLLOW INITIAL OUTBOUND TRACK (MODIFIED DECREE OF 20TH SEPTEMBER 2011)

Except for safety or control reasons, pilots of turbojet aircraft are to follow the initial track of the standard instrumental departure depicted in the aeronautical information publications until a defined distance, according to the runway in use:

- Take-offs runway 08L/R: 4,6 NM from VOR DME PGS;
- Take-offs runway 09L/R: 8,2 NM from VOR DME CGN;
- Take-offs runway 26L/R: 11 NM from VOR DME PGS (except if joining initial departure SID 1Z);
- Take-offs runway 27L/R: 6,1 NM from VOR DME CGN (except if joining initial departure SID 1Z).

**PROCEDURES FOR LANDING (MODIFIED DECREE OF THE 20TH SEPTEMBER 2011)**

Pilots are to perform their approach so as to maintain the last altitude assigned by ATS until reception of glide path. After the interception the final approach must be performed so as not to fly beneath this plan.

RESTRICTIONS ON THE USE OF APU (DECREE OF THE 27TH JULY 2012)

The use of fixed alternative means (400 Hz or 50 Hz power supply and PCA) or when unavailable, alternative mobile means (GPU and ACU) provided to the operator is mandatory, except in case of system failure or technical incompatibility.

For departing flights:

- on parking stands equipped with fixed or mobile alternative means for power and air conditioning, the use of APU is limited to 10 minutes prior to the scheduled engine start-up time;
- on parking stands not equipped with such alternative means, the use of APU is limited to 60 minutes for aircraft with MTOW < 140 t, and 80 minutes for aircraft with a MTOW > 140 t.

For arriving flights:

- on parking stands equipped with fixed or mobile alternative means for power and air conditioning, the use of APU is limited to 5 minutes plus the time required to connect to these means, after the time of arrival at the parking stand;
- on parking stands not equipped with such alternative means, the use of APU is limited to 30 minutes or the required time to disembark all passengers, offload the cargo haul and perform all operations related to the arrival.

NIGHT TIME RESTRICTIONS



CAUTION: THE APPLICATION HOURS MAY DIFFER ACCORDING TO THE RESTRICTION CONSIDERED.

BANNING OF UNSCHEDULED NIGHT TAKE-OFFS AND LIMITATION OF SLOTS NUMBER

(MODIFIED DECREE OF THE 6TH NOVEMBER 2003)

Take-off of an aircraft between **12.00 am and 4.59 am** local time of leaving parking stand, is prohibited unless subjected to allocation of departure slot (COHOR) within the given time brackets of day in question.

(DECREE OF THE 6TH NOVEMBER 2003)

Between **12.00 am and 4.59 am** for departures and **12.30 am and 5.29 am** for arrivals, disused slots will be deleted. During the winter season 2003-2004 and summer season 2004, 22500 slots were distributed to airlines. For the winter season 2016-2017 and summer season 2017, this figure is up to 17 877.

Possible exceptions:

- aircraft carrying out sanitary or humanitarian missions;
- military aircraft and aircraft belonging to the State and exclusively affected to a public utility;
- aircraft carrying out governmental flights;
- aircraft in emergency situation relating to flight safety or pax safety reasons.



AIRCRAFT SOUND PERFORMANCES

(MODIFIED DECREE OF THE 6TH NOVEMBER 2003)

No aircraft with certified noise level at said approach point exceeding value of 104,5 EPNdB shall land between **12.30 am and 5.29 am**, local time of arrival at parking stand

No aircraft with certified noise level at said overflight point exceeding value of 99 EPNdB shall take-off between **12 am and 4.59 am** local time of leaving parking stand.

Possible exceptions:

- aircraft carrying out sanitary or humanitarian missions;
- military aircraft and aircraft belonging to the State and exclusively affected to a public utility;
- aircraft carrying out governmental flights;
- aircraft in emergency situation relating to flight safety or pax safety reasons.

(MODIFIED DECREE OF THE 20TH SEPTEMBER 2011)

No aircraft in compliance with standards as per annex 16 of the convention relative to international civil aviation of the 7th December 1944, volume 1, 2nd part, chapter 3 with an accumulated margin less than 10 EPNdB may:

- land between **10 pm and 6 am**, local time ;
- leave the parking stand, for taking-off, between **10 pm and 6 am**, local time.

Possible exceptions:

- aircraft carrying out sanitary or humanitarian missions;
- military aircraft and aircraft belonging to the State and exclusively affected to a public utility;
- aircraft carrying out governmental flights;
- aircraft in emergency situation relating to flight safety or pax safety reasons.



VOLUMES OF ENVIRONMENTAL PROTECTION (VPE)

(DECREE OF THE 18TH FEBRUARY 2003)

Provisions relating to volumes of environmental protections linked to initial departure procedures apply to propeller aircraft only between **11.16 pm and 5.59 am**, local taxiing time out of park stand. Those volumes are detailed in the part I.2 of this guide

OPERATIONAL RESTRICTIONS

FLIGHT PROCEDURES

Westbound, between **12 am and 5 am**, local time of departure from parking area, departures follow special tracks in order to reduce noise pollution:

- departures from runways 27L – 27R westbound and southbound follow SID 1Z (see AD2 LFPG SID RNA 7, 8 and CONV 2) ;
- departures from runways 26L – 26R follow RDL 266° PGS (MAG 266°). At 6.3 NM from PGS, right RDL 329° from BT (RM 329°) to join SID 1A (northbound and eastbound) or 1Z (southbound and westbound).
- This procedure is announced by DE GAULLE PREFLIGHT as follows: “night initial departure to join SID ...”.

The “Continuous descent” procedure is generalised at CDG airport between **12.30 am and 5 am**, local time.

(MODIFIED DECREE OF THE 20TH SEPTEMBER 2011)

Eastbound, arrivals through the procedure OKIPA for traffic coming from South-East is not permitted from **10.20 pm to 7 am**, local time over flying MOSUD.

(MODIFIED DECREE OF THE 20TH SEPTEMBER 2011)

The testing of engines (all operations carried out on an aircraft which is stationary with its engines going for more than 5 minutes or at a power setting greater than power used for starting engines or taxiing) cannot be carried out from **10 pm to 6 am**, local time.

Exceptions: derogations can be granted by the minister in charge of civil aviation, from firstly **10 pm and 11 pm**, and secondly from **5 am to 6 am**, local time, under exceptional circumstances of flight safety.

REFERENCES

Arrêté du 18 février 2003 portant restrictions d'usage par la création de volumes de protection environnementale sur l'aérodrome de Paris-Charles-de-Gaulle (Val-d'Oise).

Arrêté du 6 novembre 2003 modifié portant interdiction entre 0 heure et 5 heures des décollages d'aéronefs non programmés pendant ladite période horaire sur l'aérodrome de Paris-Charles-de-Gaulle.

Arrêté du 6 novembre 2003 relatif à l'attribution de créneaux horaires la nuit sur l'aérodrome de Paris-Charles-de-Gaulle.

Arrêté du 6 novembre 2003 modifié portant restriction d'exploitation nocturne de certains aéronefs dépassant un seuil de bruit au décollage ou à l'atterrissage sur l'aérodrome de Paris-Charles-de-Gaulle.

Arrêté du 20 septembre 2011 modifié portant restriction d'exploitation de l'aérodrome de Paris-Charles-de-Gaulle (Val-d'Oise).

Arrêté du 27 juillet 2012 réglementant l'utilisation des moyens permettant aux aéronefs de s'alimenter en énergie et climatisation-chauffage lors de l'escale sur les aérodromes de Paris- Charles-de-Gaulle, Paris Orly et Paris Le Bourget.

AERONAUTICAL INFORMATION PUBLICATION OF PARIS-CHARLES DE GAULLE AIRPORT

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All procedures and restrictions linked to the measures to fight against noise pollution are written in the AIP (AD-2.LFPG-25). Volumes of environmental protections are detailed in the AIP for departures (AD2 LFPG VPE 01) and for arrivals (AD2 LFPG VPE 05).

Night procedures for westbound departures are detailed in the AIP (AD 2 LFPG SID RWY WEST CONV INI-INSTR 02).



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