



REMOVE CEILING FROM IAC CHARTS
LANDING MINIMA
TAKE-OFF MINIMA



**Departamento de Controle
do Espaço Aéreo**

DEPARTMENT OF AIR SPACE CONTROL - DECEA

www.decea.gov.br

REMOVE CEILING

Comply with Doc 9365 (All-Weather Ops)



REMOVE CEILING

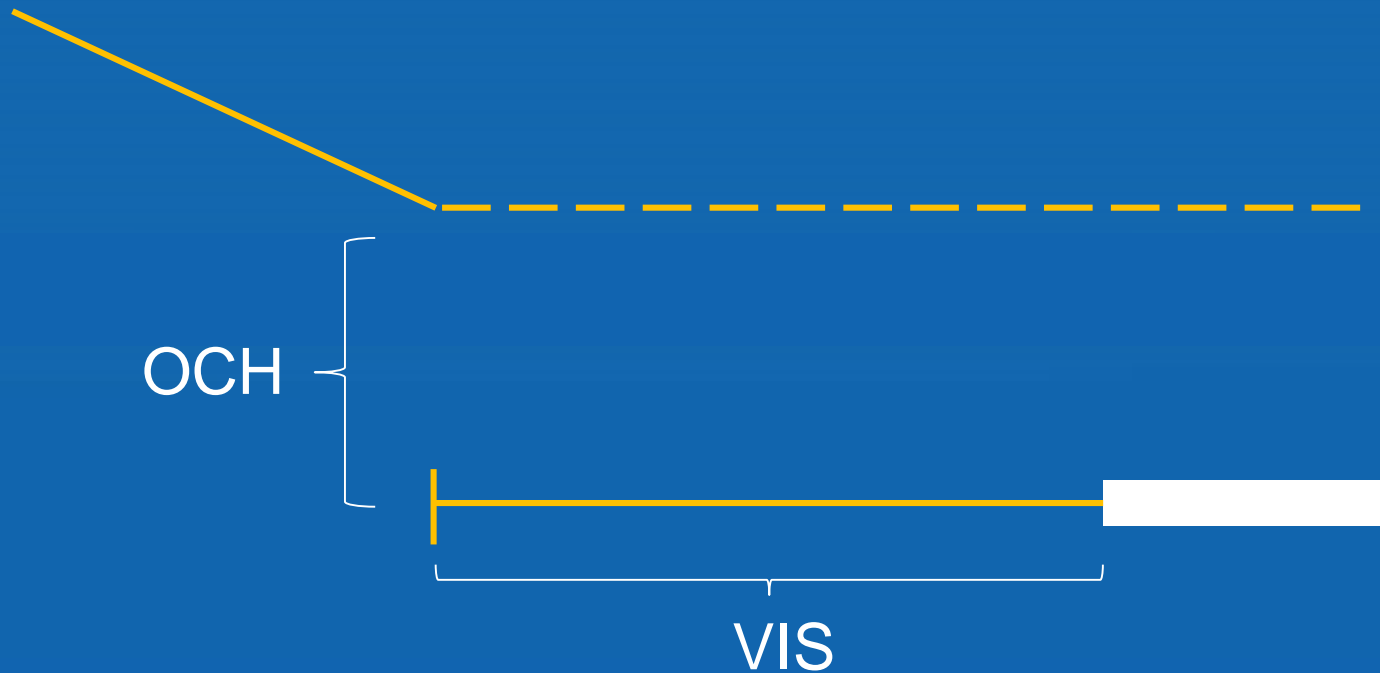
- Descent until OCH is always safe



OCH

REMOVE CEILING

- Ceiling is only a reference
- OCH + VIS provide safety



REMOVE CEILING

- Brazil used ceiling for decades
- NEW CHANGE



REMOVE CEILING

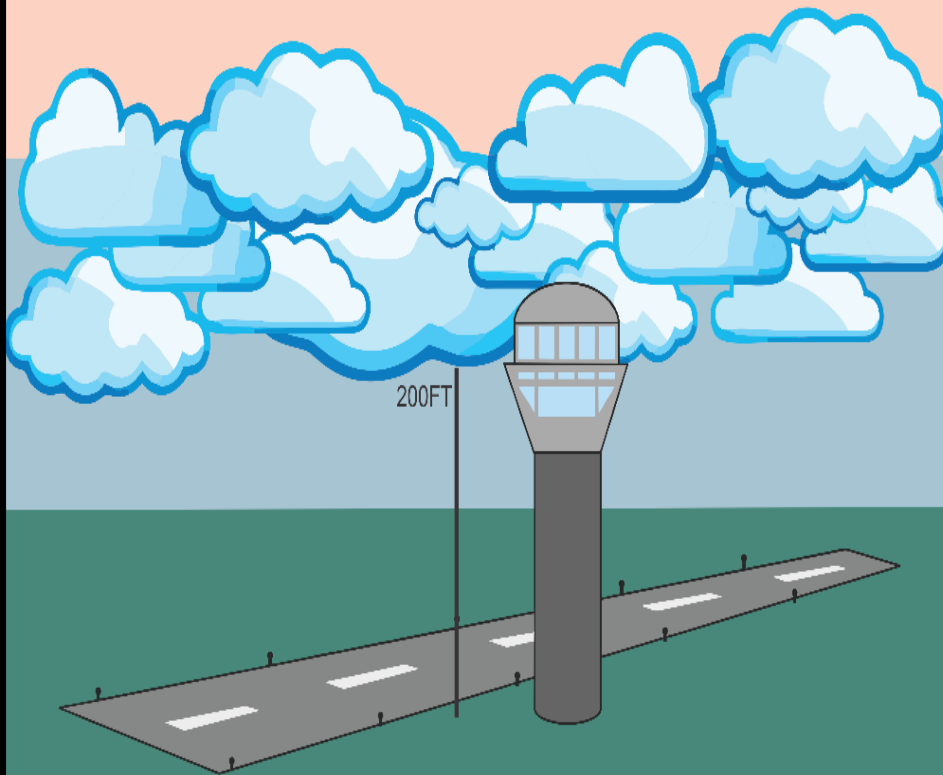
Applicable to IFR traffic

POUSO DIRETO STRAIGHT-IN	CAT	A	B	C
CAT I	DA / OCH / TETO		2644 / 200 / 200	
	ALS/NO ALS/RVR ALS (m)		800 / 1200 / 700 (*)	
LOC	MDA / OCH / TETO		3030 / 590 / 600	
	ALS/NO ALS/RVR ALS (m)		800 / 1600 / 700	



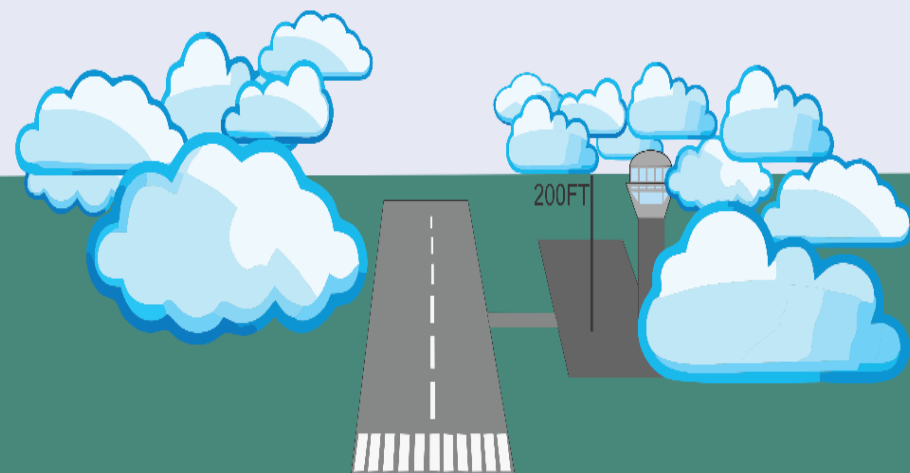
MITH

CEILING IS ABSOLUTE



TRUE

CEILING IS A REFERENCE



REMOVE CEILING

JAN 2018 new charts WITHOUT ceiling



APPROACH MINIMA

Today FAA TERPS Minima

Changing to Doc 9365 table



ANOTHER TARGET

After removing ceiling...

Take-off minima is being studied



TAKE-OFF MINIMA

TODAY

Minima for landing of the opposite RWY

It is possible to be lower keeping safety level?



TAKE-OFF MINIMA

**Table 6-1. Examples of approved take-off minima
(Commercial transport aeroplanes)**

Facilities

RVR/VIS¹

Doc 9365 shows minima for commercial

General aviation aviation?

Helicopters?



TAKE-OFF MINIMA

TERPS

Table 3-12. Standard Civil Takeoff Minimums

Aircraft type	Visibility (SM)
Fixed wing w/ ≤ 2 engines	1
Fixed wing w/ > 2 engines	1/2
Helicopters 1/2	

Aprox. 1600m

Aprox. 800m

Aprox. 800m

***CEILING** WHEN NECESSARY TO SEE AND AVOID OBSTACLES

TAKE-OFF MINIMA

DOC 9365 ICAO

**Table 6-1. Examples of approved take-off minima
(Commercial transport aeroplanes)**

<i>Facilities</i>	<i>RVR/VIS¹</i>
Adequate visual reference ² (day only)	500 m/1 600 ft
Runway edge lights or runway centre line markings ³	400 m/1 200 ft
Runway edge lights and runway centre line markings ³	300 m/1 000 ft
Runway edge lights and runway centre line lights	200 m/600 ft

*DEPENDING ON THE LIGHTS AND RVR IT CAN GO DOWN TO 75m

*CLOUD BASE MAY BE USED IF THERE IS NO AVOIDANCE OF OBSTACLES

TAKE-OFF MINIMA

WHAT ARE THE TAKE-OFF MINIMA IN SAM COUNTRIES?
EXAMPLES?

