


## How to use Take Off/Landing Chart



### What is Take/Off Landing Chart?

This chart is used by SATA Internacional real A310 pilots. Almost airlines have their one charts. This chart was made to help pilots having all the fundamental information for the respective Take Off and Landing. So we decided to bring more realism to our virtual flights by getting one of this charts. I've created this document to explain the way this chart is used. Let's start with the Take Off chart.

### Take Off Chart

		<b>Internacional</b>		<b>A 310</b>		<b>TAKE OFF</b>	
CO/RTE/FLT N.º _____		FROM/TO _____ / _____		DATE _____			
<b>TOW:</b> _____		<b>V1 :</b> _____		ATIS CODE: _____			
<b>FLAPS:</b> _____		<b>VR:</b> _____		RWY: _____			
		<b>V2 :</b> _____		WIND: _____ / _____ Kt			
FLEX TEMP: _____		F: _____		VISIBILITY/ CEILING: _____			
CG: _____ %	PITCH: _____	S: _____		QNH/QFE: _____			
ACCEL ALT: _____		O: _____		TEMP: _____ / _____ °C			
				TRANS ALT: _____			



1. First, right down the flight number.

**SATA**  
Internacional **A 310 TAKE OFF**

CO/RTE/FLT N.º _____		FROM/TO _____ / _____	DATE _____
<b>TOW:</b> _____	<b>V1:</b> _____	ATIS CODE: _____	
<b>FLAPS:</b> _____	<b>VR:</b> _____	RWY: _____	
	<b>V2:</b> _____	WIND: _____ / _____ Kt	
FLEX TEMP: _____	F: _____	VISIBILITY/ CEILING: _____	
CG: _____ %	PITCH: _____	S: _____	QNH/QFE: _____
ACCEL ALT: _____	O: _____	TEMP: _____ / _____ °C	
		TRANS ALT: _____	



2. Next, insert the departure and destination ICAO airport. For example, LPPT/LPPD.

**SATA**  
Internacional **A 310 TAKE OFF**

CO/RTE/FLT N.º _____		FROM/TO _____ / _____	DATE _____
<b>TOW:</b> _____	<b>V1:</b> _____	ATIS CODE: _____	
<b>FLAPS:</b> _____	<b>VR:</b> _____	RWY: _____	
	<b>V2:</b> _____	WIND: _____ / _____ Kt	
FLEX TEMP: _____	F: _____	VISIBILITY/ CEILING: _____	
CG: _____ %	PITCH: _____	S: _____	QNH/QFE: _____
ACCEL ALT: _____	O: _____	TEMP: _____ / _____ °C	
		TRANS ALT: _____	



3. Then, note down the date of the flight.

**SATA**  
Internacional **A 310** **TAKE OFF**

CO/RTE/FLT N.º _____		FROM/TO _____ / _____	DATE _____
<b>TOW:</b> _____	<b>V1 :</b> _____	ATIS CODE: _____	
<b>FLAPS:</b> _____	<b>VR:</b> _____	RWY: _____	
	<b>V2 :</b> _____	WIND: _____ / _____ Kt	
FLEX TEMP: _____	F: _____	VISIBILITY/ CEILING: _____	
CG: _____ %	PITCH: _____	S: _____	QNH/QFE: _____
ACCEL ALT: _____	O: _____	TEMP: _____ / _____ °C	
		TRANS ALT: _____	



4. In the fourth step you will take note of Take Off Weight. To get that information, go to your flight plan and there you get it.

**SATA**  
Internacional **A 310** **TAKE OFF**

CO/RTE/FLT N.º _____		FROM/TO _____ / _____	DATE _____
<b>TOW:</b> _____	<b>V1 :</b> _____	ATIS CODE: _____	
<b>FLAPS:</b> _____	<b>VR:</b> _____	RWY: _____	
	<b>V2 :</b> _____	WIND: _____ / _____ Kt	
FLEX TEMP: _____	F: _____	VISIBILITY/ CEILING: _____	
CG: _____ %	PITCH: _____	S: _____	QNH/QFE: _____
ACCEL ALT: _____	O: _____	TEMP: _____ / _____ °C	
		TRANS ALT: _____	



5. Simply right down the flap position for TakeOff.



6. V1....VR....V2, they are: Take Off decision speed, rotate speed and Take Off safety speed. These values are available in the aircraft speed reference table.

SATA Internacional		A 310		TAKE OFF
CD/RTE/FLT N.º _____		FROM/TO _____ / _____		DATE _____
TOW: _____	V1 : _____	ATIS CODE: _____		
FLAPS: _____	VR: _____	RWY: _____		
FLEX TEMP: _____	V2: _____	WIND: _____ / _____ Kt		
CG: _____ %	F: _____	VISIBILITY/ CEILING: _____		
PITCH: _____	S: _____	QNH/QFE: _____		
ACCEL ALT: _____	O: _____	TEMP: _____ / _____ °C		
		TRANS ALT: _____		



7. In this section you have to introduce the Flexible Temperature (if used), the Centre of Gravity and Pitch Trim for Take Off. Also you will take not of your accelerate altitude, so you will take that altitude like a reference, once you are reaching that altitude the aircraft will change from Take Off power to climb power, and that's when you start do "clean" the plane by retracting flaps, slats etc.

CD/RTE/FLT N.º _____		FROM/TO _____ / _____	DATE _____
<b>TOW:</b> _____	<b>V1 :</b> _____	ATIS CODE: _____	
<b>FLAPS:</b> _____	<b>VR:</b> _____	RWY: _____	
	<b>V2 :</b> _____	WIND: _____ / _____ Kt	
FLEX TEMP: _____	F: _____	VISIBILITY/ CEILING: _____	
CG: _____ %    PITCH: _____	S: _____	QNH/QFE: _____	
ACCEL ALT: _____	O: _____	TEMP: _____ / _____ °C	
		TRANS ALT: _____	



8. Here you have to input true reference speeds. F = flap speed to maintain when airborne with Take Off power, S = reference speed when retracting from flap position to slat position and O (Green Dot) = when reaching this speed the pilot must “clean” the aircraft by retracting slats and powering the aircraft to a climb power as climb speed.


CD/RTE/FLT N.º _____		FROM/TO _____ / _____	DATE _____
<b>TOW:</b> _____	<b>V1 :</b> _____	ATIS CODE: _____	
<b>FLAPS:</b> _____	<b>VR:</b> _____	RWY: _____	
	<b>V2 :</b> _____	WIND: _____ / _____ Kt	
FLEX TEMP: _____	F: _____	VISIBILITY/ CEILING: _____	
CG: _____ %    PITCH: _____	S: _____	QNH/QFE: _____	
ACCEL ALT: _____	O: _____	TEMP: _____ / _____ °C	
		TRANS ALT: _____	



9. In this section you first take note of the ATIS (Air Terminal Information Service) it's a letter associated to a determined weather condition (starts with A (Alpha) and will change to B (Bravo) once the weather change, until Z (Zulu), so you can advice ATC that you got that information simply saying you have Charlie for example. The ATIS will say the current letter in the beginning. Then, runway in use, wind (degrees/speed), visibility ceiling, current QNH, temperature and dew point (temperature/dew point). TRANS ALT, you have that information in the respective SID chart. When you pass this altitude after departure you must set your altimeter from the current QNH to a standard QNH (2992/1013). If you fly online you will not get the ATIS like I showed you. For the pilots who fly online there are other ways to get that. For example: Servinfo, Squawk Box.

<b>SATA</b>		<b>A 310</b>		<b>TAKE OFF</b>	
<b>Internacional</b>					
CD/RTE/FLT N.º _____		FROM/TO _____ / _____		DATE _____	
<b>TOW:</b> _____	<b>V1:</b> _____	ATIS CODE: _____			
<b>FLAPS:</b> _____	<b>VR:</b> _____	RWY: _____			
<b>FLEX TEMP:</b> _____	<b>V2:</b> _____	WIND: _____ / _____ Kt			
<b>CG:</b> _____ %	<b>PITCH:</b> _____	VISIBILITY/CEILING: _____			
<b>ACCEL ALT:</b> _____	<b>F:</b> _____	QNH/QFE: _____			
	<b>S:</b> _____	TEMP: _____ / _____ °C			
	<b>O:</b> _____	TRANS ALT: _____			


## Landing Chart

 <b>Internacional</b>		<b>A 310</b>		<b>LANDING</b>	
DESTINATION: _____		ALTERNATE: _____			
<b>WEIGHT:</b> _____	<b>VREF:</b> _____	ATIS CODE: _____			
<b>FLAPS:</b> _____	<b>VAPP:</b> _____	RWY: _____			
REMARKS:	F: _____	WIND: _____ / _____ Kt			
	S: _____	VISIBILITY/ CEILING: _____			
	O: _____	QNH/QFE: _____			
		TEMP: _____ / _____ °C			
		TRANS LEVEL: _____			

Mod. 08B



1. First step in this chart is to insert the destination airport ICAO code for example (LPPD), and your alternate airport ICAO code for example (LPLA).

 <b>Internacional</b>		<b>A 310</b>		<b>LANDING</b>	
DESTINATION: _____		ALTERNATE: _____			
<b>WEIGHT:</b> _____	<b>VREF:</b> _____	ATIS CODE: _____			
<b>FLAPS:</b> _____	<b>VAPP:</b> _____	RWY: _____			
REMARKS:	F: _____	WIND: _____ / _____ Kt			
	S: _____	VISIBILITY/ CEILING: _____			
	O: _____	QNH/QFE: _____			
		TEMP: _____ / _____ °C			
		TRANS LEVEL: _____			

Mod. 08B



2. In the second step, take note of your LDW (Landing Weight), your flap landing configuration, your VREF (Landing Reference Speed) and your VAPP (Approach Reference Speed). The pilot can get these values by checking the respective speed reference table or simply checking the aircraft FMS (Flight Management System).

SATA		A 310		LANDING	
Internacional					
DESTINATION: _____		ALTERNATE: _____			
WEIGHT: _____	VREF: _____	ATIS CODE: _____			
FLAPS: _____	VAPP: _____	RWY: _____			
REMARKS:	F: _____	WIND: _____ / _____ Kt			
	S: _____	VISIBILITY/ CEILING: _____			
	O: _____	QNH/QFE: _____			
		TEMP: _____ / _____ °C			
		TRANS LEVEL: _____			



3. In the third step right any remarks you want. Then, the speeds for each slat/flap configuration, like in Take Off chart. O (Green Dot) = when reaching this speed the pilot must select Green Dot reference speed minus 10/20 Kts and set first slat position (15/00). S = Select second slat position and first flap position (15/15), (when reaching 1000ft AGL (Above Ground Level) select flaps 30. F = This is the speed reference for the flap landing configuration, standard procedure can be: reduce speed to VREF and select full flaps.

SATA		A 310		LANDING	
Internacional					
DESTINATION: _____		ALTERNATE: _____			
WEIGHT: _____	VREF: _____	ATIS CODE: _____			
FLAPS: _____	VAPP: _____	RWY: _____			
REMARKS:	F: _____	WIND: _____ / _____ Kt			
	S: _____	VISIBILITY/ CEILING: _____			
	O: _____	QNH/QFE: _____			
		TEMP: _____ / _____ °C			
		TRANS LEVEL: _____			



4. Same as Take Off chart but Transition Level. Given by ATC. When passing this altitude set altimeter from standard QNH (2992/1013) to current QNH.

<b>SATA</b>		
<b>Internacional</b>	<b>A 310</b>	<b>LANDING</b>
DESTINATION: _____		ALTERNATE: _____
<b>WEIGHT:</b> _____	<b>VREF:</b> _____	ATIS CODE: _____
<b>FLAPS:</b> _____	<b>VAPP:</b> _____	RWY: _____
REMARKS:   	F: _____	WIND: _____ / _____ Kt
	S: _____	VISIBILITY/ CEILING: _____
	O: _____	QNH/QFE: _____
		TEMP: _____ / _____ °C
		TRANS LEVEL: _____

Questions? Contact the Chief Pilot.

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