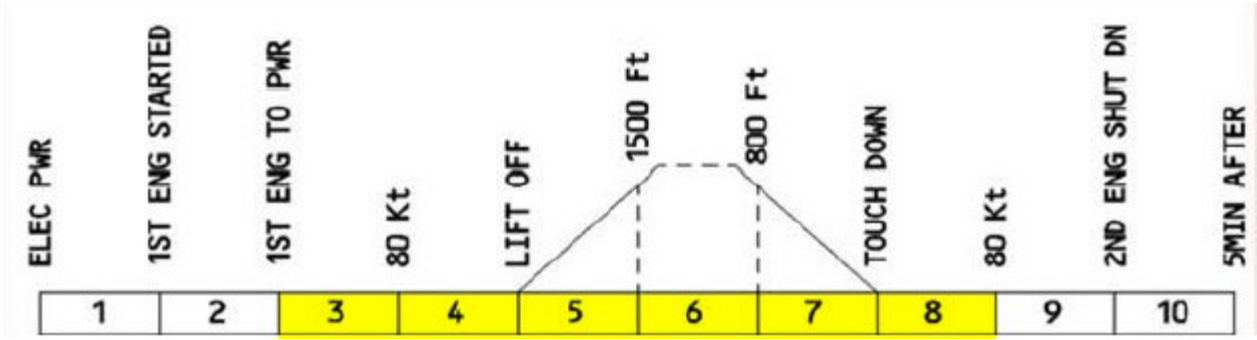
Rejected Takeoff

Criteria for Rejected Takeoff

- The Captain has to make a fast decision on his own whether or not to reject the takeoff in a very short timespan. Only after the aircraft has been stopped and the parking brake being set, can he make a complete analysis of the situation
- Hence it is important that the Captain has already built so called „Canned Decisions". I.e. Predefined decisions when to reject a takeoff and when to continue the takeoff.

Flight Phase Inhibitions



Depending on the flight phase, certain ECAM warnings/cautions are inhibited.
There is a Takeoff Inhibit and a Landing Inhibit phase.

The Takeoff Inhibit phase starts actually when the first engine reaches takeoff power until the aircraft reaches 1500 ft AGL (or 2 minutes after takeoff).. The Memo Message „T.O. Inhibit" is displayed on the E/WD.

The Landing Inhibit phase starts at 800 ft AGL and stays active until the aircraft reaches 80 kts after landing. The message „LDG Inhibit" is displayed on the E/WD.

In the **Takeoff-Inhibit Phase 4** only the follwing Malfunctions are not inhibited:

Red Warnings

- ENG 1 (2) Fire
- ENG 1 (2) OIL LO PR
- ENG DUAL FAILURE
- APU FIRE
- F/CTL L+R ELEV FAULT
- CONFIG WARNING

Amber Cautions

- ENG 1 (2) FAIL
- ENG 1 (2) SHUTDOWN
- ENG 1 (2) REV UNLOCKED
- ENG 1 (2) THR LEVER FAULT
- F/CTL L (R) SIDESTICK FAULT
- FWS FWC 1 + 2 FAULT

RTO at Groundspeeds below 72 Knots:

- The Autobrake becomes active above 72 Knots
- Be aware that in case of a RTO below 72 Knots the blue „ON" light in the AUTO BRK MAX Pushbutton remains on, but the Autobrake is not braking! So use manual brakes!

RTO near V1:

- from the Malfunction occuring to the point where brakes and spoilers are working fully, about 5 seconds will pass.
- If you reject a takeoff 4 knots after V1 where no stop margin is available, you will get a runway overrun with up to 70 knots Groundspeed!
- Statistically about 50% of all unsuccessfull Rejected Takeoffs could have been avoided with a „Continue" decision. Almost 25% of those occured because of a tire failure.

Other reasons to reject a takeoff:

- ATC call „XXX, stop immeadiately, XXX, stop immeadiately".
- Flock of big birds
- Runway incursion
- Aircraft not controllable or flyable
- Windshear warning

Procedure

Once the decision is made to reject the takeoff perform the following items:

- Thrust Levers Idle
- Maximum Reverse apply
- Check Autobrake MAX is working or brake manually with maximum force

Once the aircraft is stopped:

- stow the reversers
- set the parking brake
- Alert the cabin crew

Fight the Problem

- ECAM Procedure
- QRH Procedure

Once that is done, stopt the ECAM or QRH Procedure and consider going into the Ground Emergency EMER Evacuation checklist. This is done whenever the situation is life threatening for Passengers and Crew.