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Sent: Sunday, August 16, 2015 1:30 AM
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Up to about 28,000 feet the aircraft is limited by indicated air speed (Vne), so say you can do 350 kias at ground level, you can do that all the way up to 28,000 too. Above that the limit is by Mach number (Mmo), as you continue to climb your indicated air speed and your ground speed now decline as your Mach number remains constant.

However, even though you are slowing down your engines are burning less and less fuel, part of this is from the decreased IAS, but part is from the cold air. Colder air gives greater charge weight, it can be compressed more and the engines get greater thermodynamic efficiency.

Eventually you reach the lowest clean IAS for your current weight, and that's as high as you are going. It doesn't make any difference how much power you could add, you still can't climb because to do so you would need to slow down or break up, and to slow down you'd have to start deploying high lift devices which increase drag and reduce efficiency. This is what's called the coffin corner, your engines are probably running near max power, you are near or at max speed and you are just above the stall.

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please note

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