

Talks Tech Ten – Flight Controls Part 2

Q1: Why, at speeds above 135kts is hydraulic system pressure reduced by approximately 25% to the main PCU?

A: To limit full rudder authority in flight after takeoff and before landing

Q2: Which hydraulic system powers the ground spoilers?

A: Hydraulic system A

Q3: Will the spoiler panels extend on landing if you leave the lever in the DOWN detent? If so, when?

A: Yes, when main gear spin up > 60kts sensed, both thrust levers are retarded to idle and Reverse thrust is selected.

Q4: Flap extension should not be attempted above what altitude?

A: 20,000ft

Q5: When the flap lever is moved from UP to 1 what happens to the leading edge.

A: Leading edge Kruger flaps go to their fully extended position and the Leading edge slats to their intermediate EXTEND position.

Q6: When in flap 30 the trailing edge will auto retract to flap 25 at what speed? Then at what speed will it re-extend to 30?

A: 176kts retract, 171kts re-extend

Q7: What effect does the autoslat system have on slat position when it operates?

A: Drives them from EXTEND to FULL EXTEND

Q8: Which hydraulic system powers the leading edge when using alternate flaps and are there any considerations on that leading edge to be aware of?

A: The Standby Hydraulic system. Yes, the leading edge can't be retracted once extended.

Q9: What effect does an upslope have on V1 speed?

A: Increases V1

Q10: After a rapid decompression at 35,000ft what is the sedentary TUC for a reasonably fit individual?

A: 30 to 60 seconds