

A310 MACH NUMBER BUFFET ONSET

FCOM>>Procedure and Techniques >>Inclement Weather Operation

General Information:

- Mach number buffet may be experienced when flying below VLS at high altitude. At low speed end, VLS provides 0.3 g margin relative to MN buffet onset.
- Mach number buffet may be experienced when flying above MN value that is providing 0.3 g margin (for the prevailing gross weight & altitude). At high speed end, buffet margin relative to MN buffet onset must be managed by selecting the cruise altitude or Mach number, as a function of the gross weight.
- Mach number buffet may be experienced when increasing the load factor (turn or pull-up maneuver) at any speed.

Prevention:

- Assess and manage the buffet margin (FCOM Ref: Limitations "Buffet Onset Graph", Flight Planning "Cruise Level Chart & Buffet Margin Graph").
- When flying above optimum altitude, set bank angle selector to 15 degrees (in readiness for a possible manual reversion from NAV to HDG SEL).

Recovery:

- Keep autopilot in command unless otherwise required.
- If MN buffet is experienced as a result of flying below VLS, check FMS/FCU target speed and set a target speed that provides adequate margin relative to VLS (e.g. green dot or turbulence penetration speed).
- If MN buffet is experienced as a result of flying at high MN (e.g. high cost index, high headwind component or high selected MN), reduce the selected or target MN.
- If MN buffet is experienced during a turn, reduce bank angle demand slowly using small roll inputs (large roll inputs would result in roll spoilers deflection thus increasing buffeting level). Similarly apply small pitch inputs if pitch attitude has decreased during the turn (large pull-up inputs will increase load factor and therefore buffeting level).
- Consider reducing altitude to increase buffet margin.

Disclaimer: "A310 Mach Number Buffet Onset" are personal notes of the undersigned. These notes do not sanction any pilot to violate his/her Company's Standard Operating Procedures, Aircraft Manuals or Manufacturer's Recommendations.