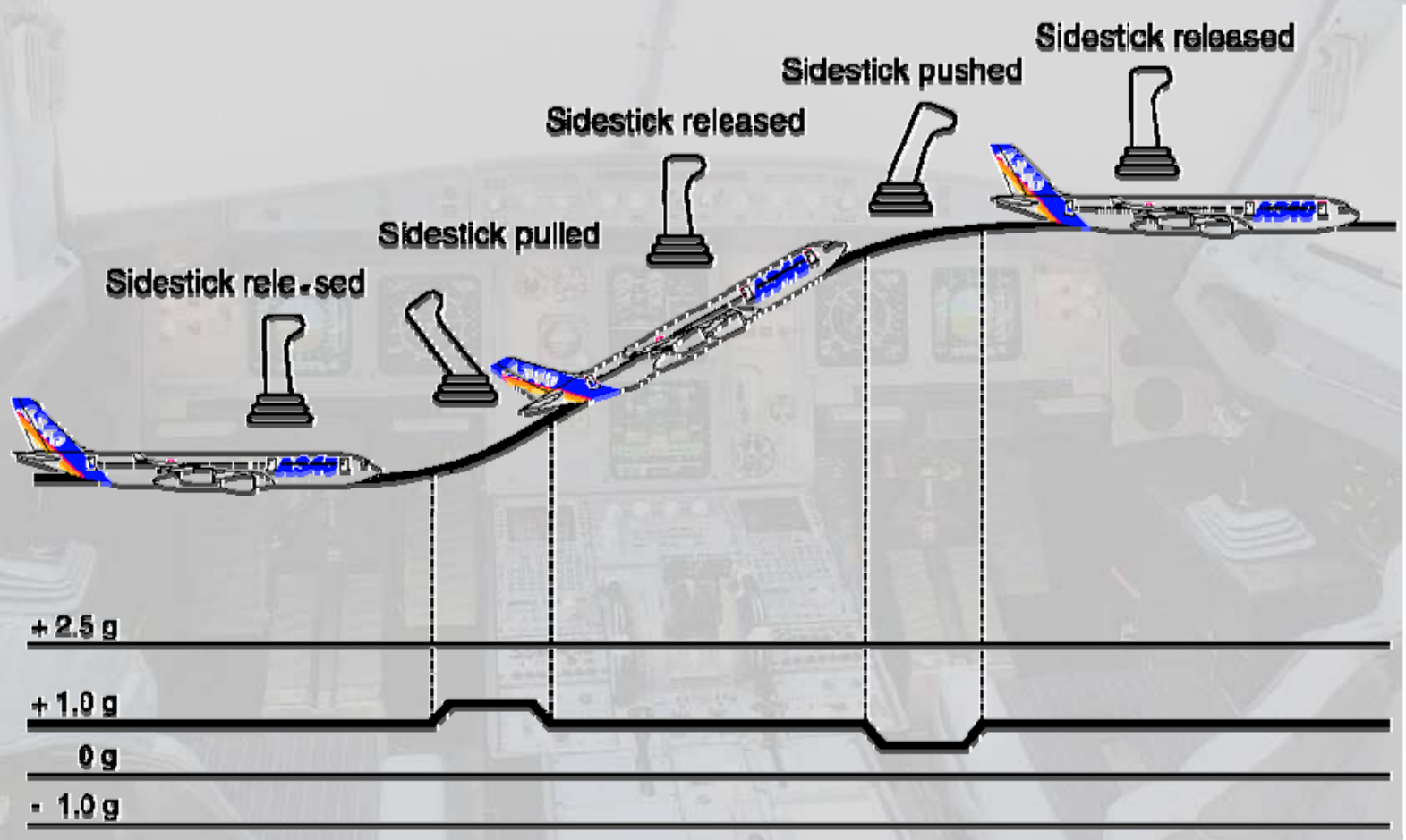
BASIC PRINCIPLE

FLIGHT MODES

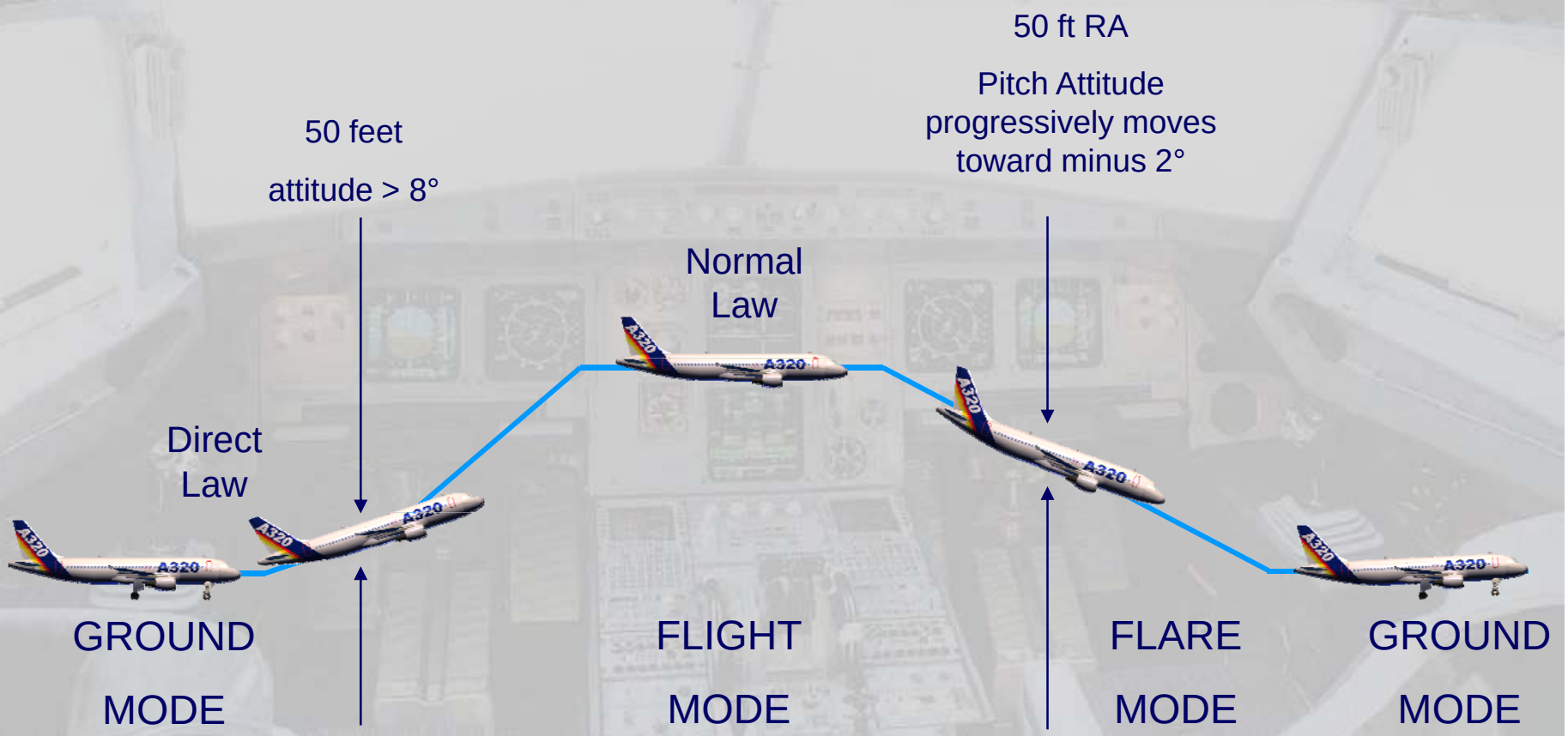
PROTECTIONS

TURN & COORDINATION

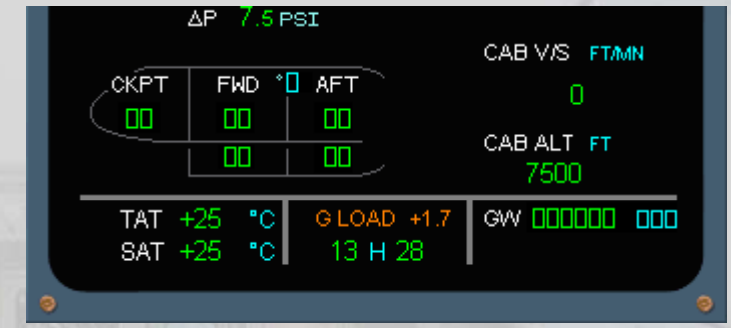
A320 - Flight Control Law - Basic principle



A320 - Flight Control Law - Flight Modes



A320 - Protections - Load Factor Limitations



Clean: 2.5 g / -1 g

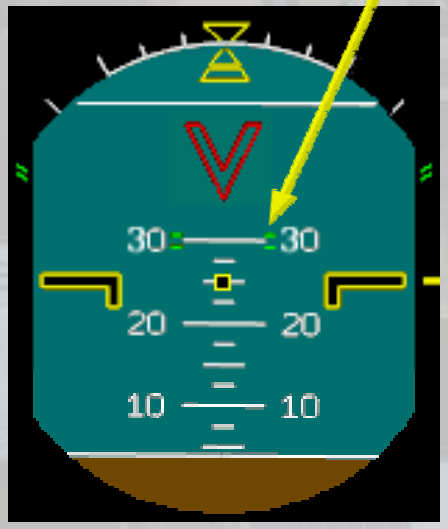
Conf: 2.0 g / 0 g

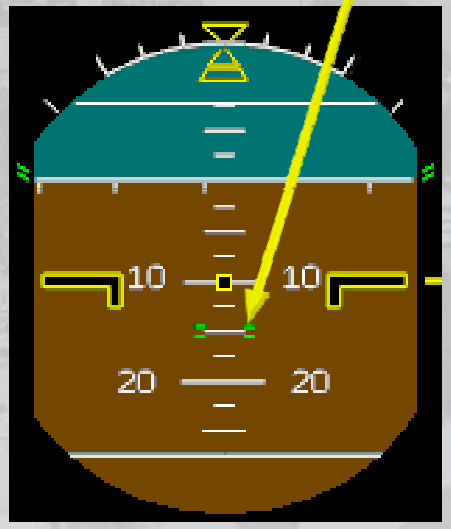
A320 - Protections - Pitch Attitude

30° nose up in config 0 to 3,
reduced to 25° at low speed

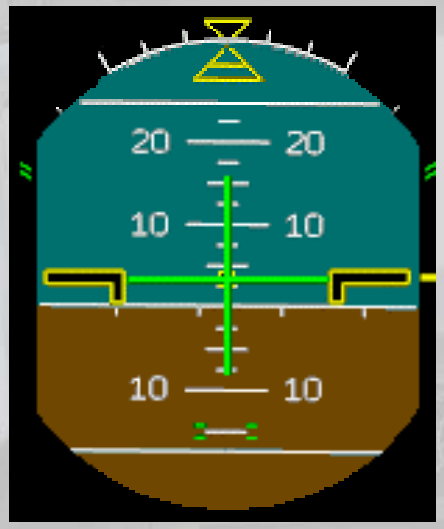
25 ° nose up in config full,
reduced to 20 ° at low speed

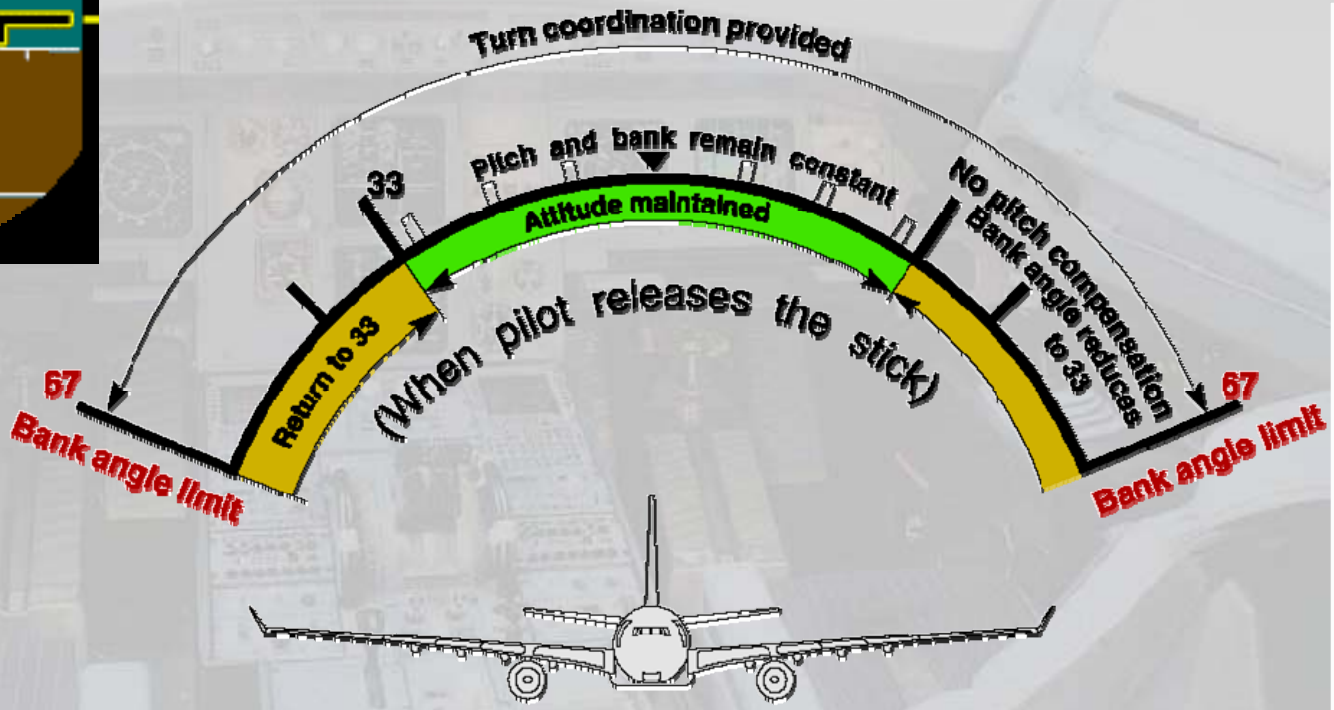
15° nose down





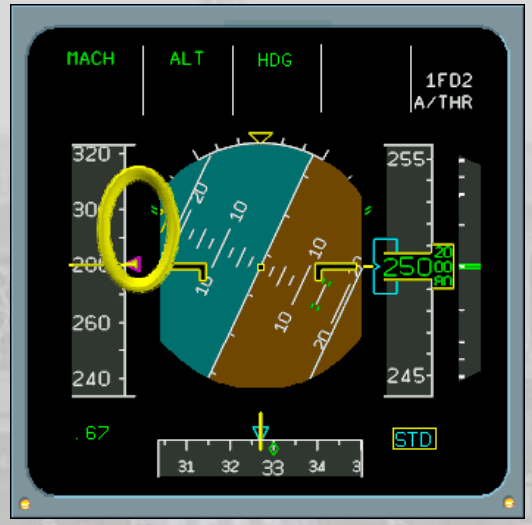
A320 - Protections - Bank Angle (1)



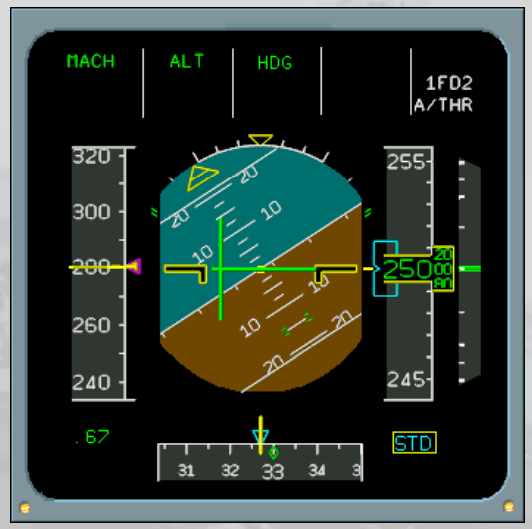


A320 - Protections - Bank Angle (2)

Bank angle limits is 67°.



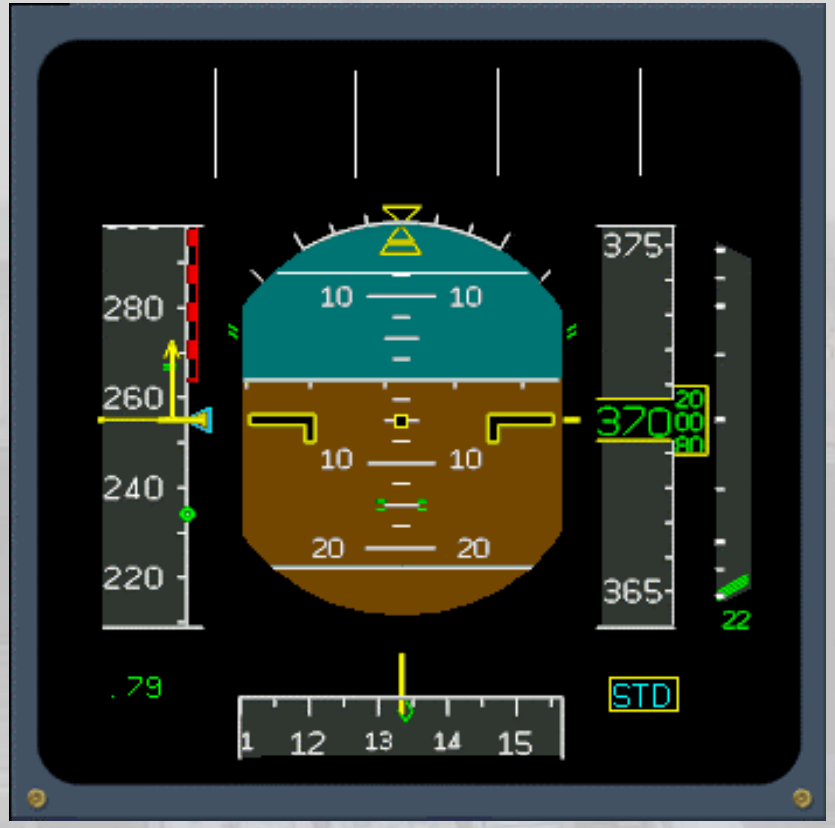
Full lateral side stick : bank angle increases and maintains 67°.



If side stick released when bank angle > 33 °, the aircraft will return to and maintain 33 °.

A320 - Protections - High Speed (1)

High speed protection
MMO (VMO)



Auto trim is frozen

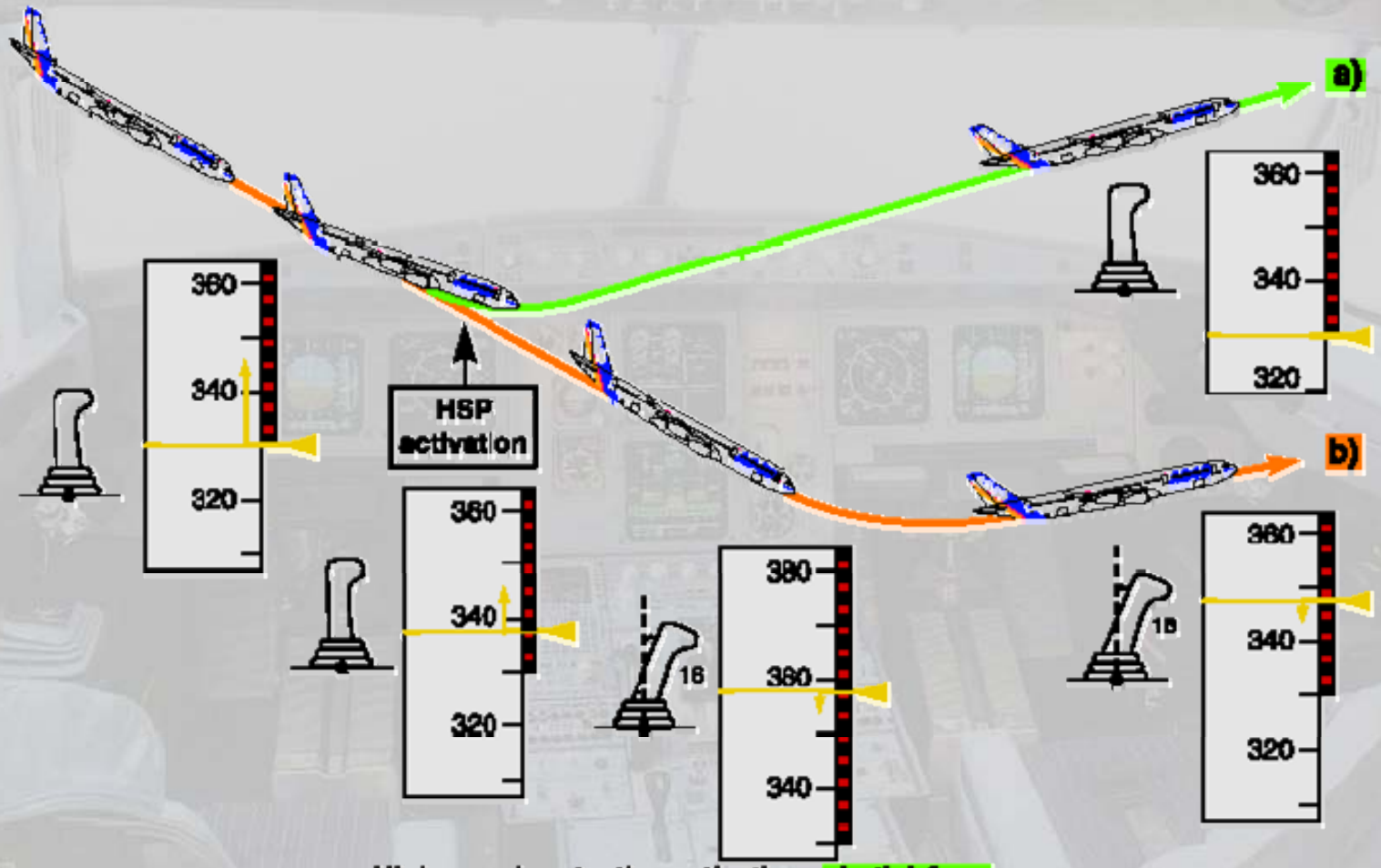
Nose up demand

Roll limit 45°

Positive spiral stability

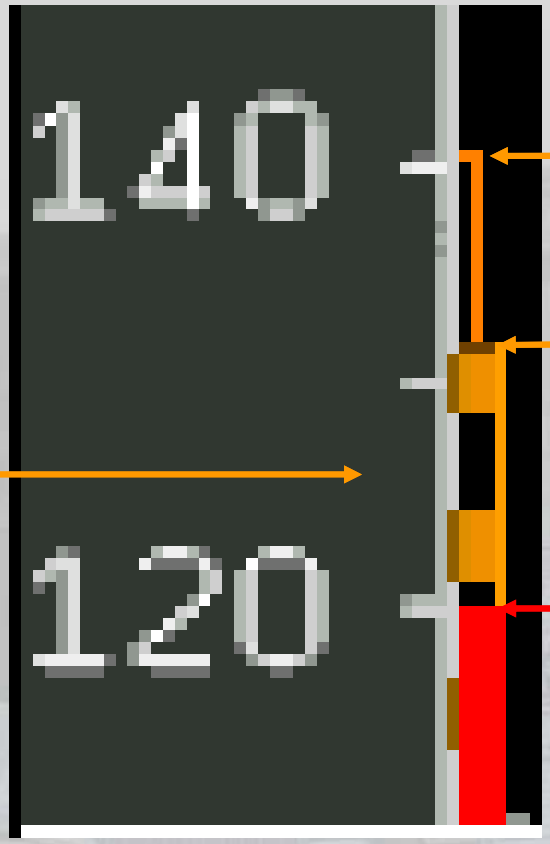
Overspeed warning

A320 - Protections - High Speed (2)



High speed protection activation: a) stick free
b) stick full forward

A320 - Protections - High Angle of Attack



VLS

Vα Prot

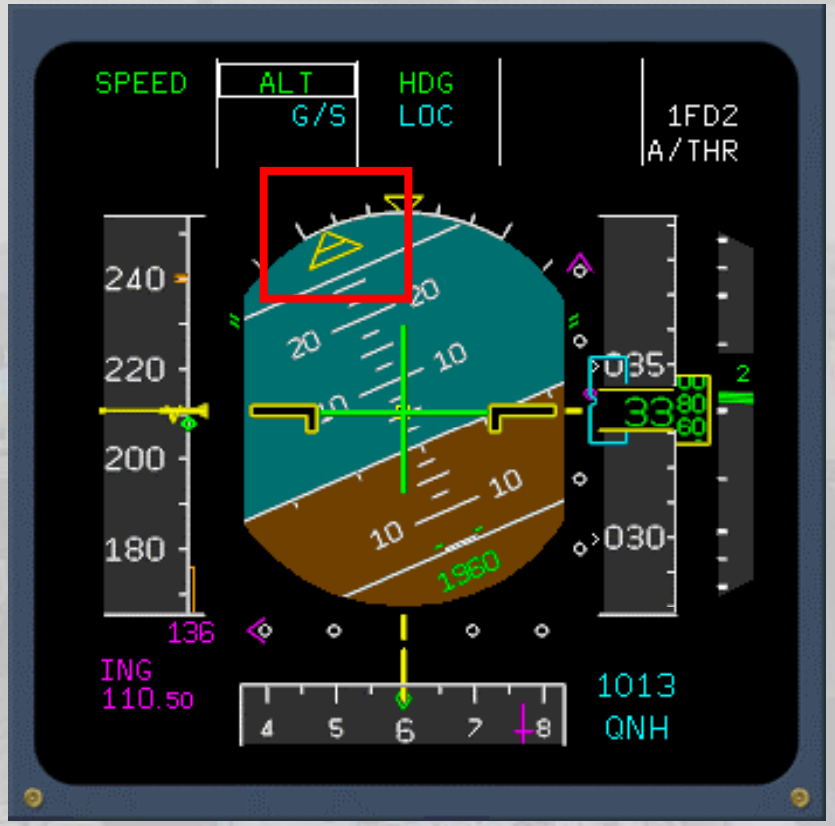
Pitch down with stick free
Auto trim is frozen
Bank angle Max 45°
Pitch order → α

α Floor
A/THR
function
TOGA

Vα Max

Computer adjusts the pitch
to maintain **α Max**

A320 - Turn Coordination & Automatic Yaw Damping



No need for rudder inputs in turn

Turn coordination

Automatic yaw damping