

FLIGHT CONTROL MODE COMPARISON

	NORMAL	ALTERNATE	DIRECT	BACKUP
GAINS	Control deflection scheduled with airspeed	Two fixed gains: 250 / 340 250 - Flaps or Gear	Two fixed gains: 250 / 340 250 - Flaps or Gear	Two fixed gains: 250 / 340 250 - Flaps or Gear
YAW DAMPER	Normal	Simple (IRS 3)	Simple (IRS 3)	Limited (IRS 3)
PITCH TRIM SWITCHES	Normal (all 3)	BACKUP PITCH trim Possibly required	BACKUP PITCH trim Possibly required	Controlled with BACKUP PITCH switch only
SPEED BRAKES	YES	YES	YES + NO AUTO RETRACT	NO + NO AUTO RETRACT
GROUND SPOILERS	YES	YES	NO	NO
AUTOPILOT, AOA LIMITING High Speed Protection, Turn Coordination, Dynamic Rudder Limiting, Manoeuvre load Alleviation.	YES AOA LIMITING	NO STICK SHAKER at 0.85	NO NO – SHAKER	NO NO – SHAKER
REQUIREMENTS NB: NORMAL / ALTERNATE / DIRECT will use both actuator if available. BACKUP only EBHA	At least ONE IRU , not conflicting with IRU or both AHRS. AND Two or more ADS (heated and consistent data). AND HSCU not in Back-Up	IRU is invalid or inconsistent or conflicting with AHRS. OR One valid ADS or less OR Loss of comms from FCC to HSCU	Channels A & B of both FCC1 & FCC2 have experienced communications / monitor failure	All FCC channels have failed and BFCU providing PFCS commands
FCS RESET	NA	POSSIBLE to NORM	NA	NA
SUB MODES in NORM	GND	TAKE-OFF & LANDING	CRUISE	AOA LIMITING
CAUSE	WEIGHT ON WHEELS	WEIGHT OFF WHEELS	Autopilot OR Gear & Flaps UP	AOA >0.87 - 0.93
TRIMMING	STABALISER	STABALISER	ELEVATOR then STAB OFF-LOAD	May get shaker at 0.94. Autopilot disc' No nose up trim.
INDICATIONS	Pitch Trim range Green and Green Box (inc' numbers)	Pitch Trim range & Green Box removed (Inc' numbers)	Speed pointer only	FCC AOA Limiting AOA PROT ACTICE MAX 0.96
FCS RESET	Resets – Alternate to Normal. Resets – Sub Mode that has failed to transition properly Resets – REU or EBHA that has been recovered after power loss Resets – HSCU after power regained.			

FCC1 – CH A – UPS	(UPS Battery lifed for 30 mins)
FCC1 – CH B – L.ESS	(Ship Battery lifed for 16 mins)
BFCU – UPS	(UPS Battery lifed for 30 mins)
FCC2 – CH A – R.ESS	(Ship Battery lifed for 16 mins)
FCC2 – CH B – UPS	(UPS Battery lifed for 30 mins)