FMC Air work & Integration

Setting up Approaches:

    1. "Request ATIS"   ATIS (Field conditions / Landing Runway)

    2. "Recall Review / Landing Assessment"   (Current Wt. / Flap setting via ACARS)

PF Verbally commands: PNF Actions of (Arrival "Y") follows:

    4. "Select _____ approach…   with a Course Intercept Fix XXX." Or
                                                     just select approach if in a hold"
                                                     (DEP/ARR pg.) "Confirm & Execute"
                                                     --- on the Legs Page. Then verify ILS
                                                     or Approach Freq. tuned (NAV/RAD).

    5. "Flaps____"   (INIT/ REF) Select 25 or 30 as directed

    6. "Auto brake _____"   Select directed braking

       • Brief Approach   Transfer AIRCRAFT & Brief accordingly

    7. "Descent" / "Approach Checklist"   PNF Reads

FMC Flight Proficiency:

    1. Direct To: (LEGS) Line select or enter fix into 1L. PF verify, then (EXEC).

    2. Intercept Course: (LEGS) type fix, then enter into L1. Type inbound course desired
                                             and enter into [Intercept Course] R6. PF verify, then (EXEC).

    3. Intercept Radial:
                  Inbound   (NAV/RAD) type fix/radial into L1. Then enter the fix
                                        (LEGS) enter into L1. Type inbound course, enter [Intercept
                                        Course] R6. PF verify, then (EXEC).

                  Outbound   (NAV/RAD) type fix/radial into L1. Then enter place bearing /
                                        distance (LEGS) enter into L1. Type inbound course, enter into
                                        [Intercept Course] R6. PF verify, then (EXEC).

    4. Place Bearing / Distance: (LEGS) Create in the scratch pad then enter into L1.

    5. Place Bearing / Place Bearing: (LEGS) Create in the scratch pad then enter into L1.

6. Airway Intercepts: (RTE) enter routing Airways and Fixes. PF verify, then (EXEC).
(LEGS) select the TO waypoint into scratch pad then line select L1.
Intercept course will be created automatically. Reaffirm the course.
PF verify, then (EXEC).

7. Program Holding: (HOLD) select L1 if desired fix or L6 if other desired.
Verify holding pattern or enter new holding patter details.
Enter EFC time for FMC fuel computations. PF verify, then (EXEC)
Exit Hold R6 – If leaving holding, also be cautious and use this
prompt if in approach mode.

Remember:
- We always "navigate TO a waypoint."
- If Radial is used in clearance begin with the (NAV/RAD) page.
- If on a radar vector then extend course for approaches making sure that the "TO Fix" is always in front of the aircraft on the approach.

Flight Mode Annunciations in the FMA

Auto Throttle	Roll	Pitch
TH REF	TO/GO	TO/GO
THR	LNAV*	VNAV ALT
HOLD @ 65kts.	HDG SEL	VNAV SP
SPEED	HOLD	VNAV PATH
IDLE @ 25'	ATT	FLCH SP
	LOC*	GS*
	ROLLOUT* @ 5'	FLARE* @ 50'
		V/SPEED
		ALT

Note: * modes depicted can be armed

AutoPilot / Flight Director Modes

F/D	
CMD	
LAND3	1420'
LAND2	
NO AUTOLAND	200'

Flight Mode Annunciations in the FMA
Expanded

Auto Throttle (5 Modes)

TH REF –	100 % of Rated Thrust in referenced mode (Shown on upper EICAS).
THR-	Reference a predetermined TH setting as determined (up to but not full rated TH REF)
HOLD -	Servos disengaged after a predetermined setting on TH levers (T.O.@ 65kts / Descent)
SPD-	Thrust is maintaining speed as selected. (Either in SPD Window or FMC calc. speed)
IDLE -	Thrust is at idle (usually during descent).

Roll   (7 Modes)

TO/GO -	Ref Track or missed THR
LNAV* -	Ref. Magenta line Bank
HDG SEL –	Ref. HDG Selector (Less then 5 degrees)
HOLD -	Current heading now
ATT-	Bank attitude A/P engagement (Greater then 5 degrees)
LOC*-	Ref. Localizer signal
ROLLOUT*	@5' zero Bank Angle

Pitch   (9 Modes)

TO/GO	GRN. 8 degrees / AIR Ref V2 –V2+10. Missed Appr. Speed at missed.
VNAV SP	Ref. Magenta Speed.
VNAV ALT	MCP Alt.
VNAV PATH	FMC Alt.
FLCH SP	Adjusts elevator to maintain desired speed selected.
ALT	Alt hold mode.
V/SPEED	Ref. V/S
GS*	Ref. G/S
FLARE*	@50'/25'

Pitch mode controls the A.T. mode

AP/FD (5 Modes)

F/D	Flight Director engaged
CMD	Auto Pilot engaged note: Use center AP to keep FD's
LAND3	1420' (Cat.3 capable)
LAND2	(Cat.2 capable)
NO AUTOLAND	200'

Note: * modes depicted can be armed