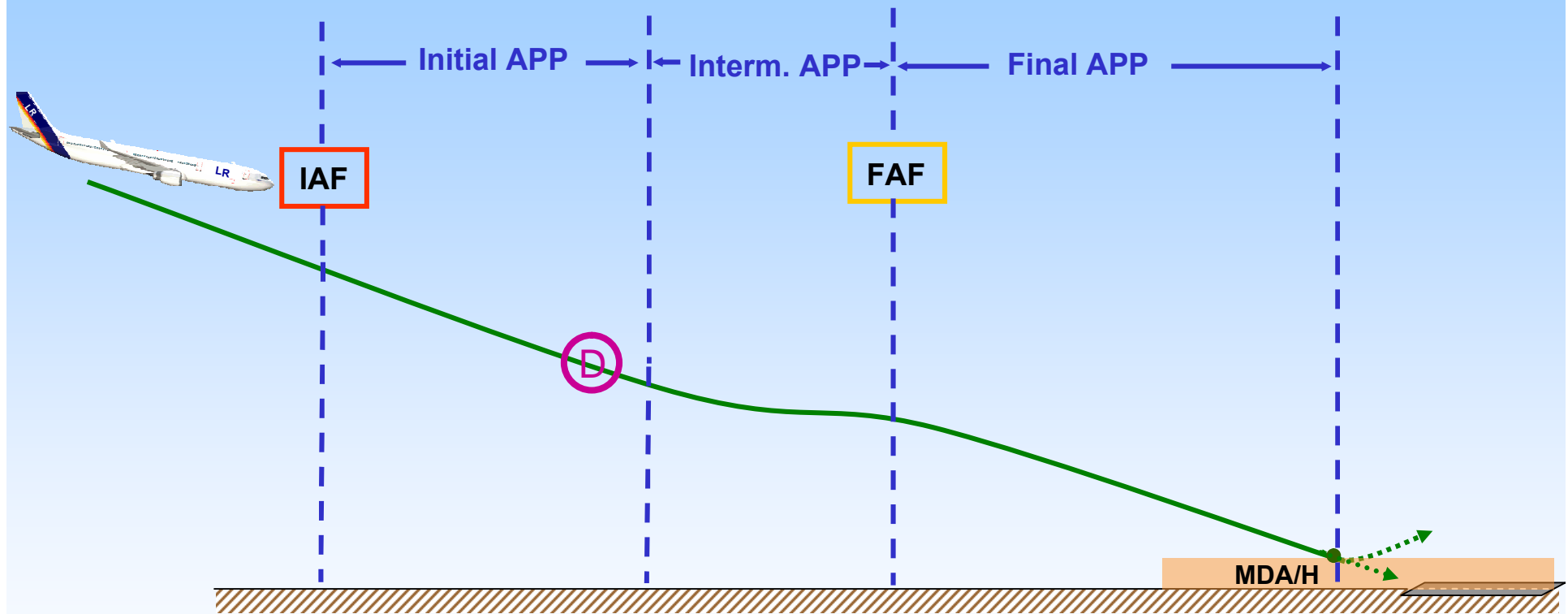


NON PRECISION APPROACH (MANAGED)



FLYING REF : TRACK/FPA (FPD)

PF

PNF

1.a. INITIAL APPROACH

SEAT BELTS.....ON/AUTO

ENG MODE selAS RQRD

NAV ACCURACYMONITOR 

When cleared to 3700 ft :

DESCENTINITIATE

FMA

BARO REF : QNH

APPROACH C/L

VAPP SPEED CSTR AT FAF.....INSERT 

➤ **LS** P/B is OFF except for **LOC** approach

➤ Different approach strategies : 

➤ 3 CONDITIONS FOR MANAGED APPROACH : 

PF

PNF

1.b. INITIAL APPROACH

When cleared for approach :

APPR PB.....ARM

FMA

TRK/FPA.....SET

Approx 15 NM from touchdown

APPR PHASE ACTIVATION.....CHECK

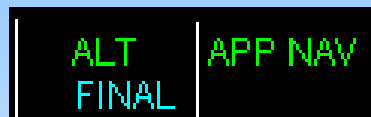
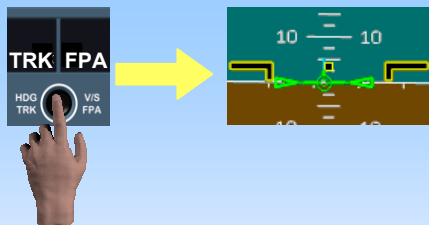
POSITIONING.....MONITOR

MANAGED SPEED.....CHECK

SPEEDBRAKES.....AS RQRD

ND MODE/RANGE.....AS RQRD

ND MODE/RANGE..... AS RQRD



AUTOMATIC



➤ For Lateral positioning properly monitor F-PLN sequencing



➤ For Vertical positioning use **V/DEV** information



PF

PNF

2. INTERMEDIATE APPROACH

RADAR TILT.....ADJUST

At green dot speed :

FLAPS 1

DECEL TOWARDS S SPEED.....CHECK

TCAS.....TA or TA/RA

At S speed, below VFE next :

FLAPS 2

DECEL TOWARDS F SPEED.....CHECK

When FLAPS 2 :

GEAR DOWN

ECAM WHEEL PAGE.....CHECK

GROUND SPOILERS.....ARM

AUTO BRAKE.....CONFIRM

When L/G down, below VFE next

FLAPS 3

When FLAPS 3, below VFE next :



FLAPS FULL

DECEL TOWARDS VAPPCHECK

PF

PNF

3.a. FINAL APPROACH

After the FAF :

FMA Check **FINAL APP** green

ANNOUNCE....."SET GA ALT xx FT"



GO AROUND ALT.....SET

ANNOUNCE....."GA ALT xx FT SET"

POSITION/FLIGHT PATH.....MONITOR



A/THR.....CHECK SPEED MODE

PF

PNF

3.b. FINAL APPROACH

SLIDING TABLE.....STOW

CABIN REPORT.....OBTAIN (CM1)

CABIN CREW.....ADVISE

WING A. ICE (if not required).....OFF

EXTERIOR LIGHTS.....SET

SLIDING TABLE.....STOW

LDG MEMOCHECK NO BLUE

LANDING C/L

FLT PARAMETERS.....CHECK 

OBSERVE ECAM MEMO

LDG SIGNS ON	LDG INHIBIT
CABIN READY	
LDG GEAR DN	
FLAPS LDG	
SPLRS ARMED	

PF

PNF

3.c. FINAL APPROACH

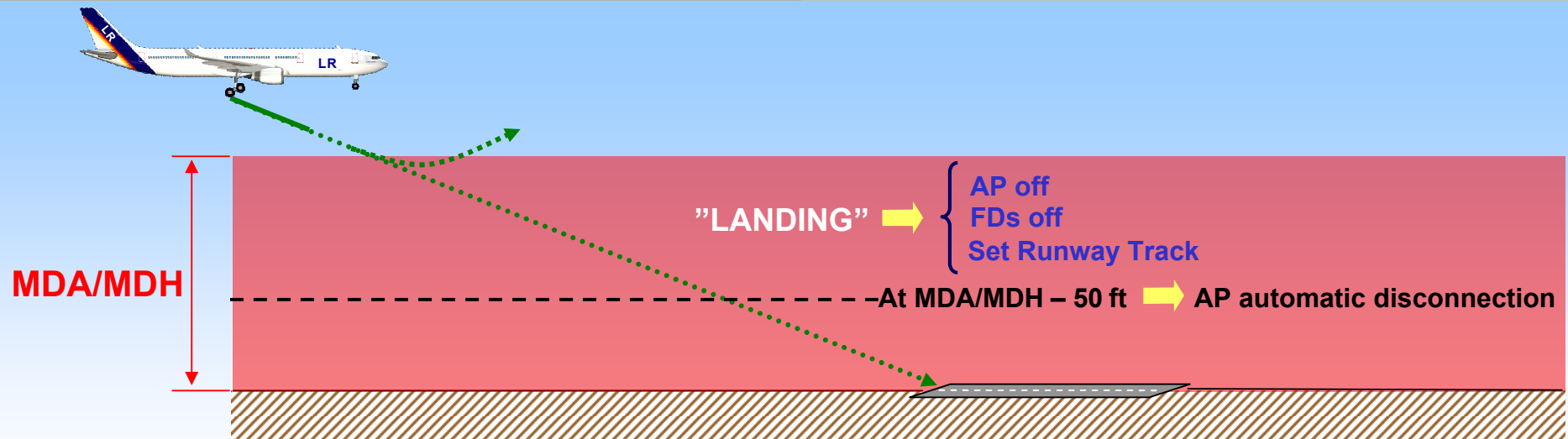
At MDA/MDH :

ANNOUNCE "LANDING"
or "GO AROUND/FLAPS"

At MDA/MDH +100 ft :

MONITOR OR ANNOUNCE....."ONE HUNDRED ABOVE"

MONITOR OR ANNOUNCE....."MINIMUM"



NAV ACCURACY



When GPS PRIMARY avail



No NAV ACCURACY required

When GPS PRIMARY lost



Use raw data to check
NAV ACCURACY



If check is negative use Selected guidance
for ILS interception

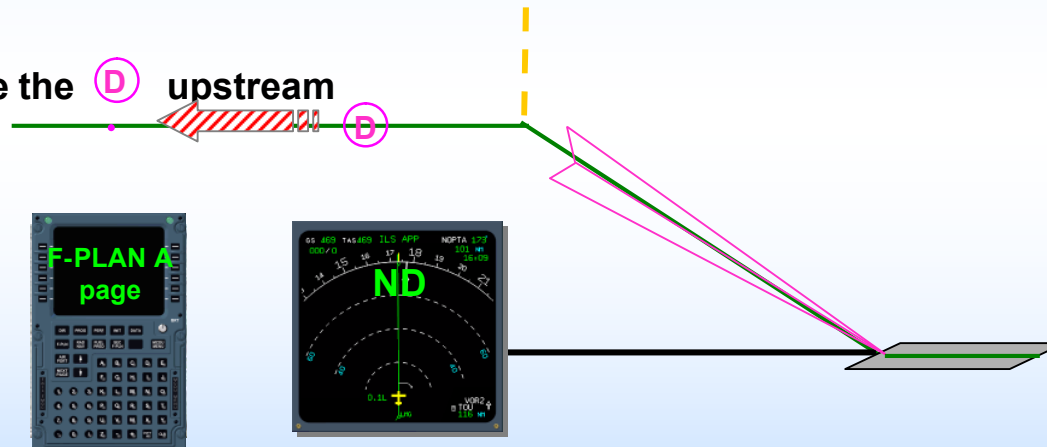
If the FMGS detects low NAV ACCURACY, then the
enhanced modes of the EGPWS are automatically
deactivated

STABILIZED APPROACH



Entering VAPP as **SPEED CONSTRAINT** at FAF...

...will displace the **D** upstream



APPROACH STRATEGIES



- Lateral and vertical selected guidance :

FPA TRACK

- Lateral managed guidance and vertical selected guidance :

FPA NAV

This type of guidance can be used provided the approach is stored in the navigation data base

- Lateral and vertical managed guidance :

FINAL APP

Whatever the strategy, the Final approach must be monitored laterally and vertically, using adequate raw data (altimeter, reference navaid)

- Note :



PULL



Lateral, vertical
selected
guidance



PULL



Vertical
selected
guidance

PF

PNF

1.a. INITIAL APPROACH

SEAT BELTS.....ON/AUTO

ENG MODE selAS RQRD

NAV ACCURACYMONITOR 

When cleared to 3700 ft :

DESCENTINITIATE

FMA

BARO REF : QNH

APPROACH C/L

VAPP SPEED CSTR AT FAF.....INSERT 

➤ **LS** P/B is OFF except for **LOC** approach

➤ **3 CONDITIONS FOR MANAGED APPROACH :** 

1) Approach is in the database

2) GPS PRIMARY or NAV ACCURACY has been checked

3) Approach is validated by the airline for use of FINAL APP mode and not modified by the crew

PF

PNF

1.b. INITIAL APPROACH

BOTH PILOTS

When cleared

APPR PB...

TRK/FPA...

Approx 15 M

APPR PHAS

POSITIONIN

MANAGED

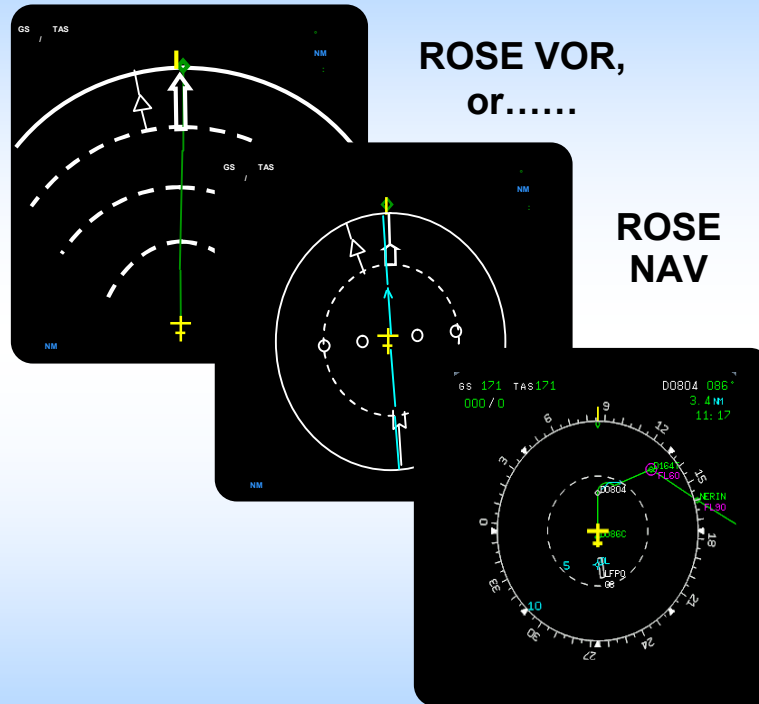
SPEEDBRA

ND MODE/R

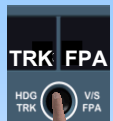
ARC, or.....

ROSE VOR,
or.....

ROSE
NAV



S RQRD



➤ For Later

➤ For Vertical

C



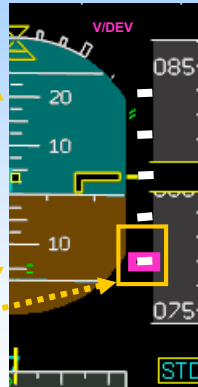
with navaid raw data



If APPROACH phase is active :

PFD V/DEV scale
max deviation : +/-200 ft

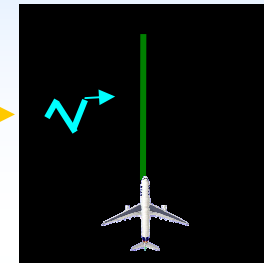
« Brick » symbol



V/DEV

FMS computed flight path

Intercept point symbol
on ND



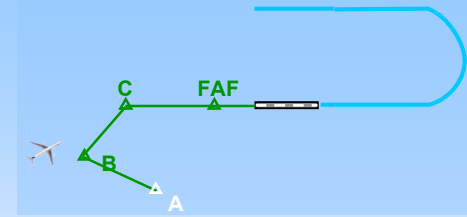
VDEV=+/- XXXX FT

if GPS PRIMARY is not available, V/DEV information is reliable only when the NAV ACCY ckeck is positive

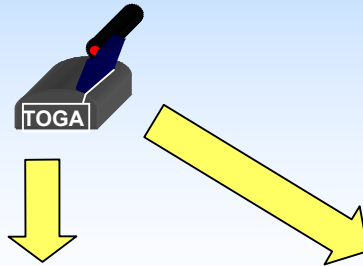
F-PLN SEQUENCING



➤ If the sequencing is not correct **APPR NAV** engagement is not possible



➤ **GO AROUND mode :**

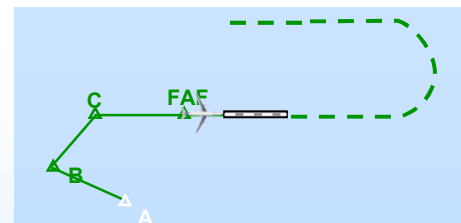


SEQUENCING



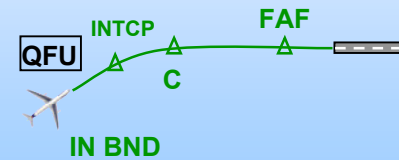
NAV mode

NO SEQUENCING



No NAV mode

➤ **F-PLAN** is automatically sequenced in case of radial inbound



PF

PNF

2. INTERMEDIATE APPROACH

RADAR TILT.....ADJUST

At green dot speed :

FLAPS 1

DECEL TOWARDS S SPEED.....CHECK

TCAS.....TA or TA/RA

At S speed, below VFE next :

FLAPS 2

DECEL TOWARDS F SPEED.....CHECK

When FLAPS 2 :

GEAR DOWN

ECAM WHEEL PAGE.....CHECK

GROUND SPOILERS.....ARM

AUTO BRAKE.....CONFIRM

When L/G down, below VFE next

FLAPS 3

When FLAPS 3, below VFE next :



FLAPS

➤ It is recommended to select **FLAPS FULL** at **VFE next - 15 knots** to minimize flaps wear.

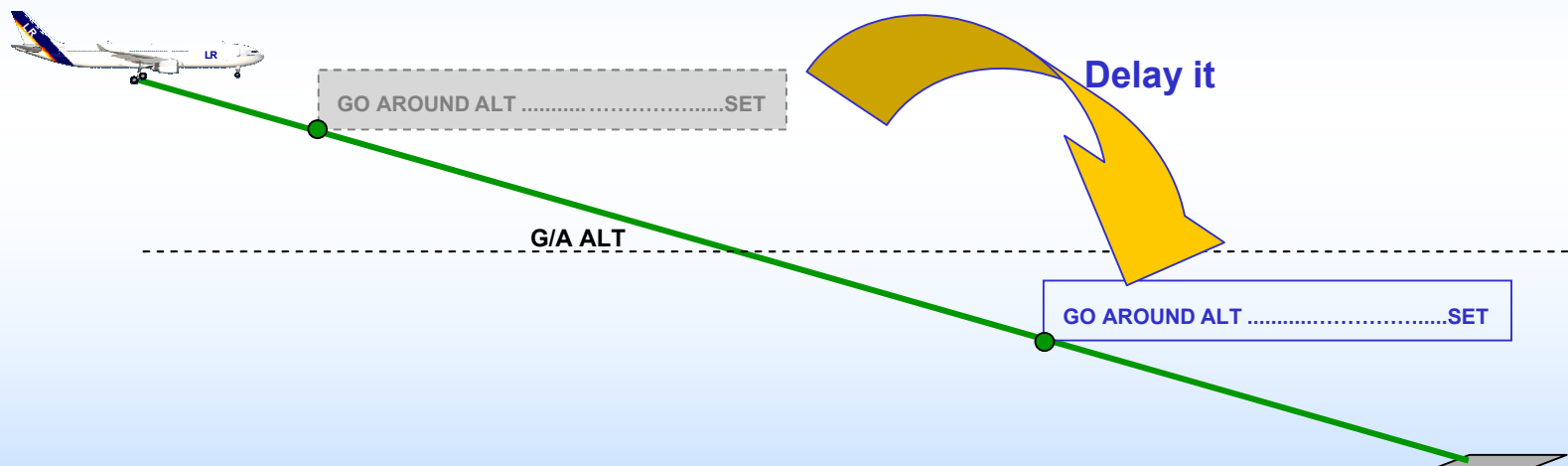
DECEL TOWARDS VAPPCHECK

GO AROUND ALTITUDE



In some cases the G/A ALT is under the current altitude of the A/C

- The pilot should delay the G/A ALT selection below G/A ALT



PF

PNF

3.a. FINAL APPROACH

After the FAF :

FMA Check **FINAL APP** green

ANNOUNCE....."SET GA ALT xx FT"



GO AROUND ALT.....SET

ANNOUNCE....."GA ALT xx FT SET"

POSITION/FLIGHT PATH.....MONITOR



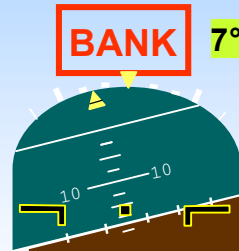
A/THR.....CHECK SPEED MODE

- Monitor the engagement of **FINAL APP** mode using the raw data info
- If FINAL APP does not engage, revert to selected approach :
 - ➡ Select FPA convergent to the Final Descent Path so as to fly with VDEV=0
 - ➡ Do not try to rearm APPR
- PNF Xchecks Altitudes and Distances with Landing charts

FLT PARAMETERS



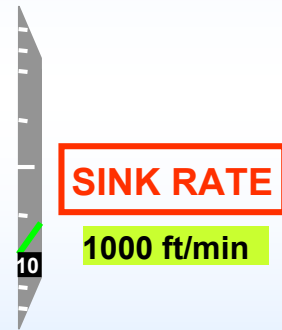
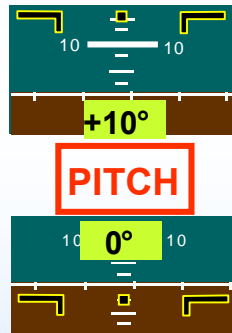
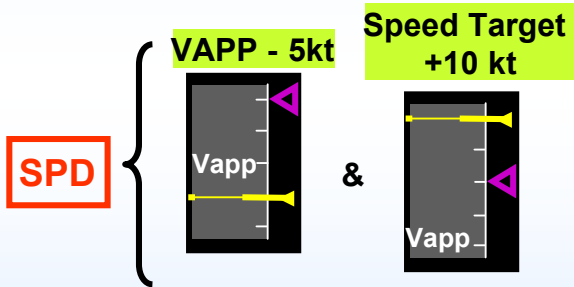
Announce any deviation in excess of FLT PARAMETERS :



COURSE
1/2 dot
(VOR)



5° ADF



_ FT HIGH or LOW
At altitude check points

