

# Falcon 7X Instrumentation

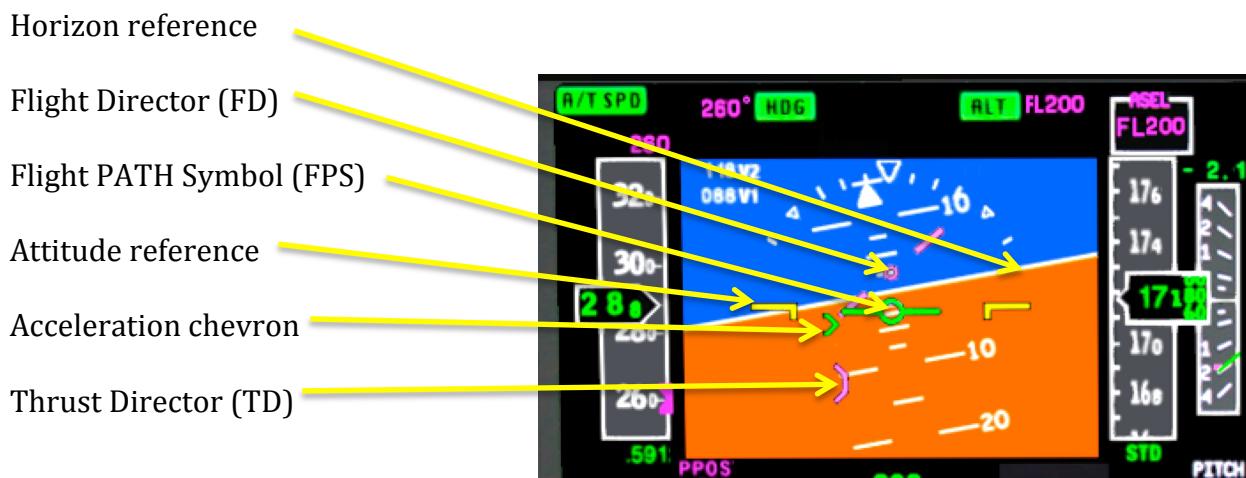
For X-Plane Flight Simulator only

## Flight Director in ADI

The EASy Attitude Director Indicator (ADI) provides in a very accurate and HUD-like picture, all necessary information about airplane trajectory and energy state :

- The Flight Path Symbol (FPS) :
  - ° Provides airplane trajectory indication
  - ° Is now a primary flight parameter. The basic Flight Director (FD) mode is the PATH mode, instead of pitch on classical Falcons.
- The acceleration chevron provides the potential acceleration along airplane flight path when it is bellow FPS, plane is decelerating, if it is above, plane is accelerating.
- The Thrust Director (TD) is the magenta open box. When it is bellow FPS you have to decelerate, if it is above, you have to accelerate.

The Flight Director (FD) is activated with 2 clic on FD/TD button on PA



In manual mode (without AP ON)

The rate of climb instruction to the FD is given by the PATH on the Guidance Panel (GP)

The speed is set on the Guidance Panel (GP) without Auto Pilot (AP) ON

The horizontal instruction is given by HDG/TRK ON (without AP ON)

Quiz : Using the picture of the ADI above, what pilot should to follow Flight instruction ?

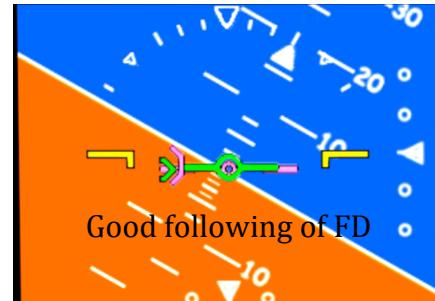
Actually the plane is going down, decelerating and turning right

Answer :

It should continue to decelerate speed

Go up

Turn left





Flight in manual mode using Flight Director (set up on Guidance Panel)

FC/TD ON

Autopilot (AP) is OFF (manual mode)

AT (Auto Throttle) is off but FD will know the speed selected

PATH is ON (default mode)

HDK/TRK is ON to in order to gate information for the FD

### FMA Area

#### Color code

Green	= Active mode
Magenta	= Active target
Cyan	= Armed target
White	= Inactive target

Lateral active Flight Director mode and associated mode reference (HDG requested)

Autothrottle Engagement status And mode

A/T SPD 105° HDG AP PATH - 5.0° ASEL FL370

222 LOC GS - 2.9

Speed bug  
Reference speed selected

Lateral armed mode

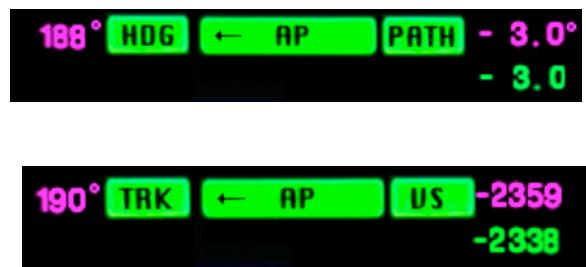
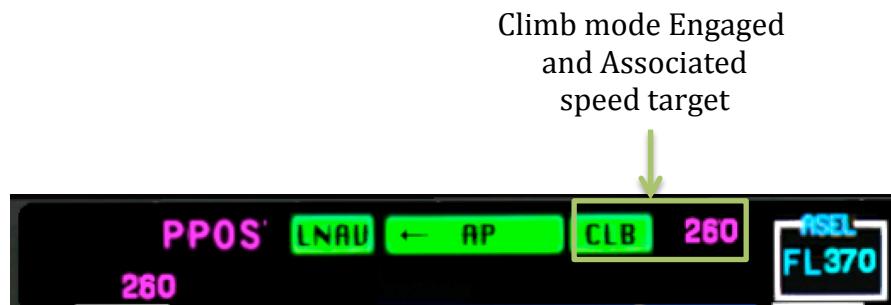
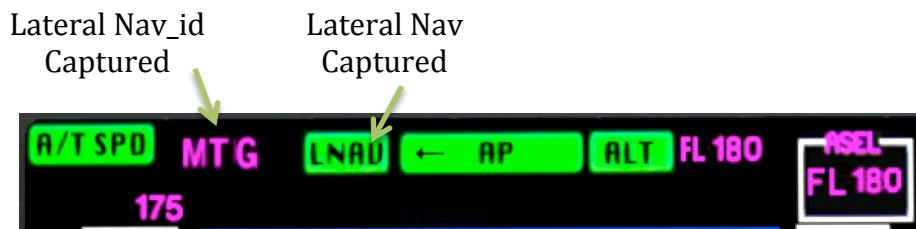
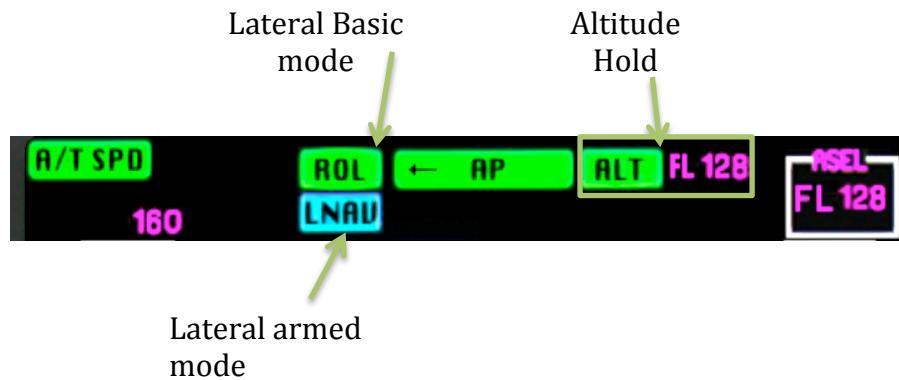
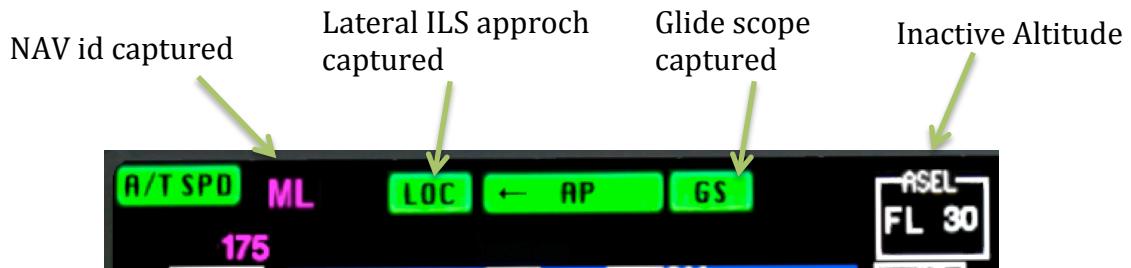
Autopilot engagement status and flying

Vertical armed mode

Vertical active flight Director mode and Associated mode ref.  
Target PATH in magenta

Altitude select

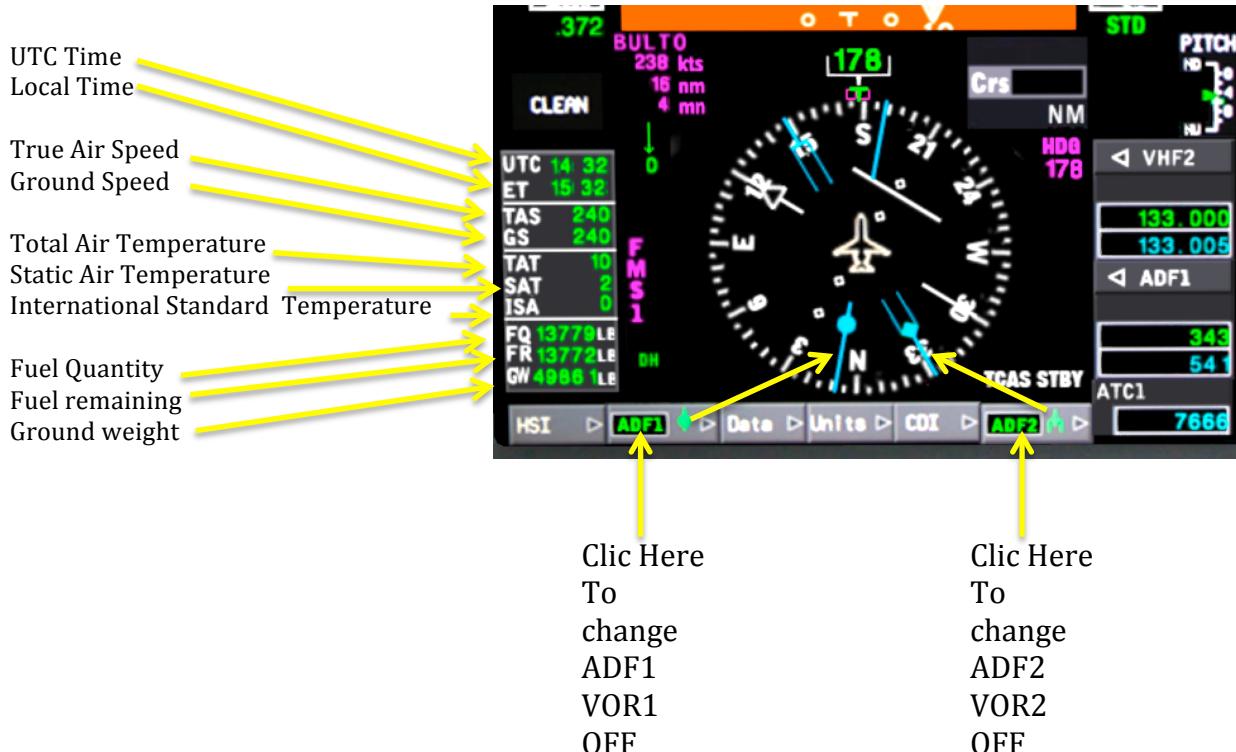
Actual PATH

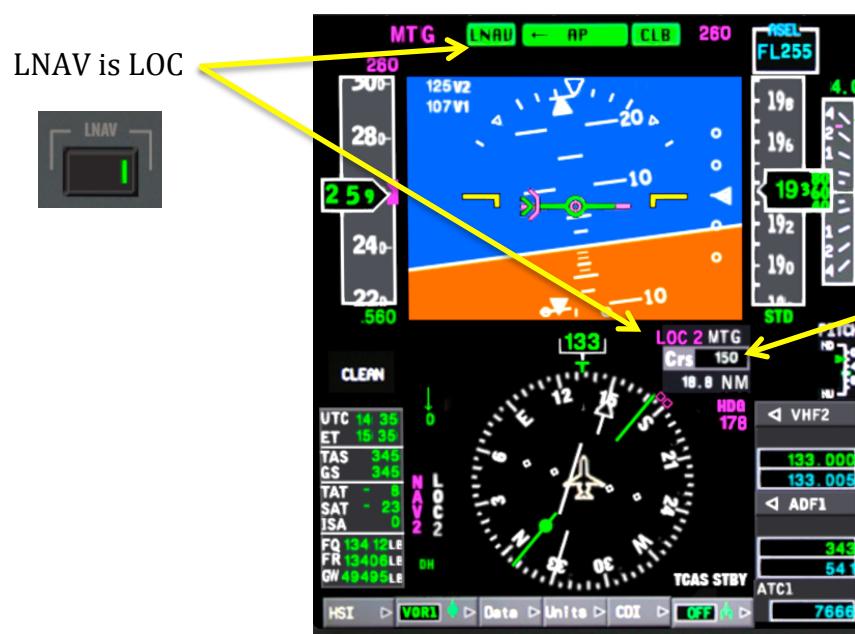
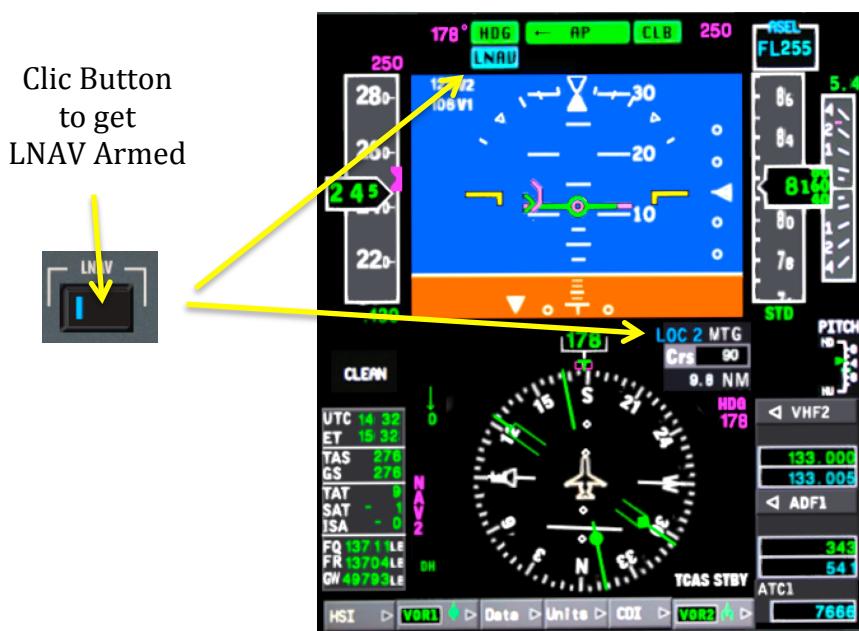


Clic button to Change VS/PATH Mode

VS ON

## NAVIGATION Without FMS





Select Crs Value to LOC LNAV  
Then select Crs value to the direction you want to go

If Crs is 150°  
Plane will go to the 150° Radial of the VOR, then it will go to cap 150° to or from VOR

## Weather



Clic to button Data then LSS to get spark didplay and WX for radar display

## ICE PROTECTION

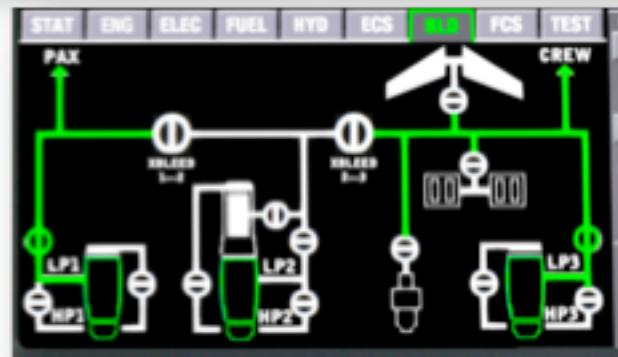
When ice is detected, you can see it in the ADI



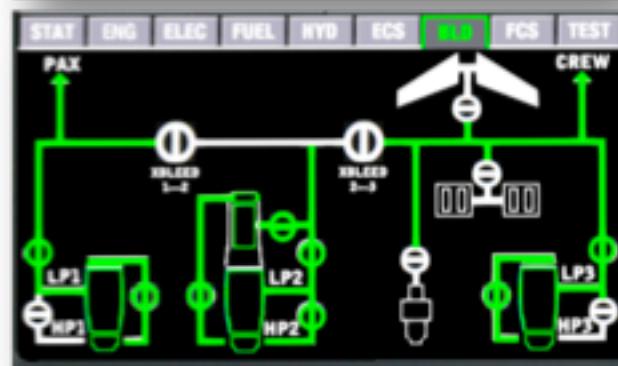
The control of ANTI-ICE system is on the overhead



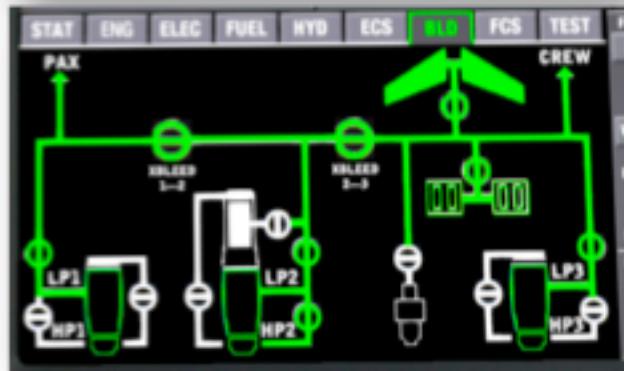
Normal situation  
Anti Ice OFF



Engines  
Anti Ice ON



Anti ice  
Wings  
&  
Brake ON



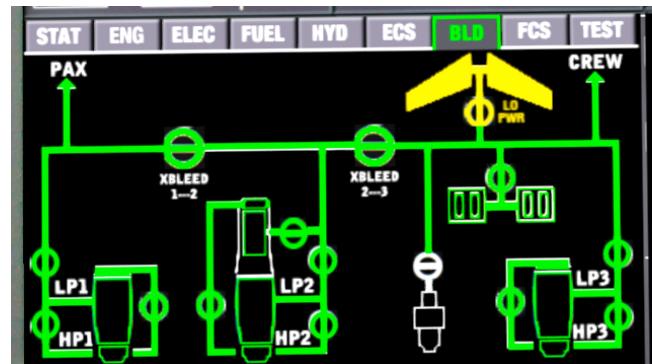
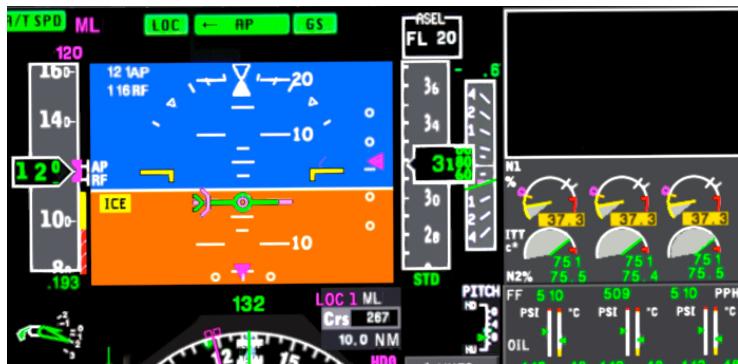
With Engines anti ice ON, Yellow tick mark is displayed

As N1 is above Tick mark, anti ice system work perfectly



N1 Power is bellow tick mark, as you want to land, you cannot increase speed to increase N1, solution is to use air brake

Recommanded speed is Approach Maneuvering speed

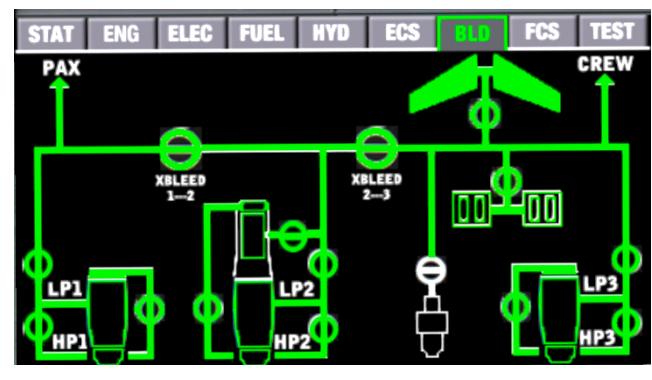


Air brake AB1 is on

VAP speed is VRF + 20 & Flap SF3

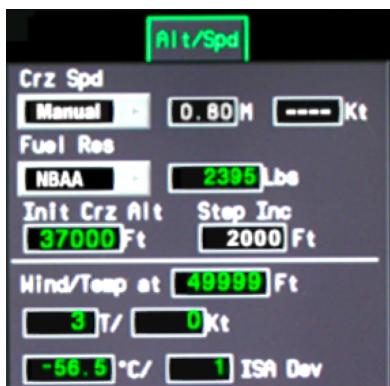
N1 is above tick mark

No more ice detected



### Cruise section

Crz Spd is used only to predict Fuel Quantity



Init Crz altitude at Take Off is calculated function of GW And Crz Spd

Actual Speed

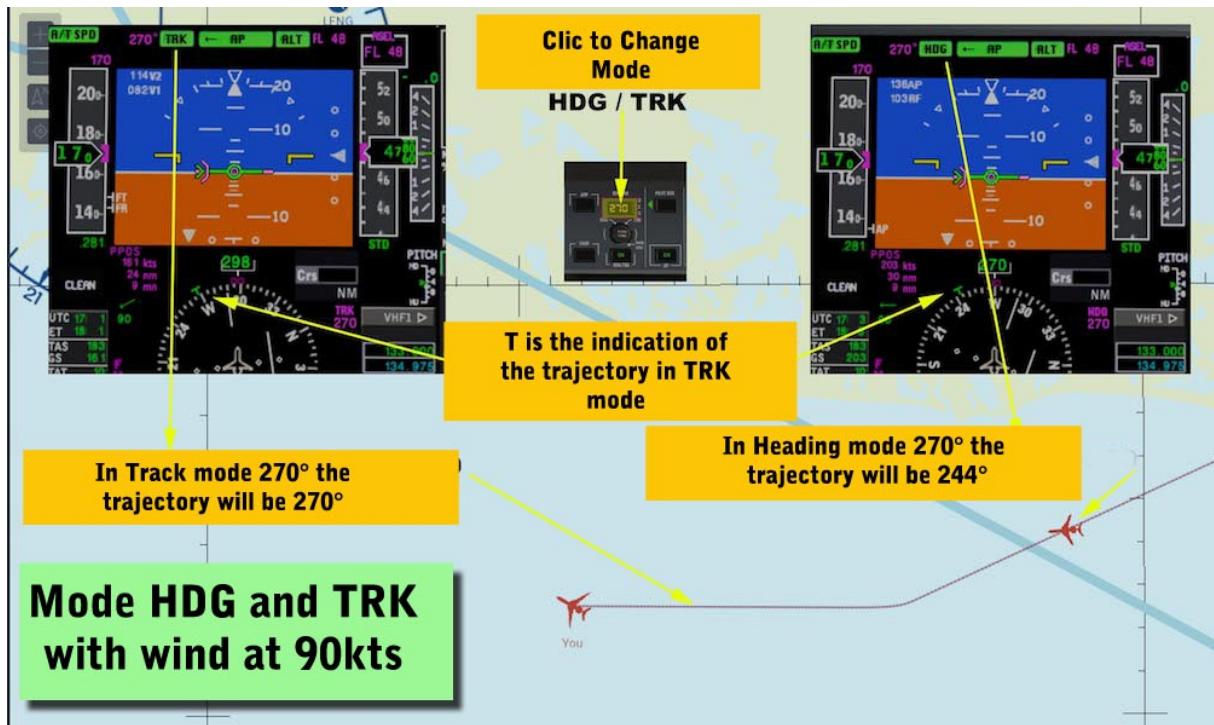
Actual Altitude

Calculated Optimum Altitude



In function of actual cruise altitude and cruise speed, the Optimum Altitude is actualized with 2000 ft step

## Heading mode



## One more thing

To open the door , clic here

