SkyCatsLab

CoPilot addon for
"PMDG 737-800 for MSFS"

(how to Install and Use)

features:

+ MSFS2020 compatible
+ PMDG 737-800 for MSFS compatible
+ Windows 10/11 compatible
+ animated 3d CoPilot model
+ can recognize and execute voice/widget commands
+ can speak with you
+ can read checklists
+ operate with Events (based on flight parameters and situation)
+ execute SOP (Normal Procedures)

LICENSE AGREEMENT

By installing this Software product («ScyCatsLab CoPilot» - MSFS2020 addon), you agree to be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement, please, do not install or use the Product.

You may install the Software onto a single computer for your personal, noncommercial use subject to these conditions:

1. You may not copy, modify, rent, sell, distribute or transfer any part of the Software except as provided in this Agreement, and you agree to prevent unauthorized copying of the Software.

2. You may not reverse engineer, decompile, or disassemble the Software.

3. You may not sublicense or permit simultaneous use of the Software by more than one user.

4. The Software may include portions offered on terms in addition to those set out here, as set out in a license accompanying those portions.

5. REFUND POLICY: As you have ability to use DEMO version and check is it work or not BEFORE purchase, NO REFUND may be given.

6. Serial key may be activated with one aircraft installed for only one Computer ID. After first activation your serial key may be used with the same aircraft at the same computer (detected as Computer ID).

THE SOFTWARE IS PROVIDED "AS IS" WITHOUT ANY EXPRESS OR IMPLIED WARRANTY OF ANY KIND INCLUDING WARRANTIES OF MERCHANTABILITY, NONINFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE.

SkyCatsLab does not warrant or assume responsibility for the accuracy or completeness of any information, text, graphics, links or other items contained within the Software.

Additional info Regarding .dll files usage - see License.txt file in "skycatslab-copilot" folder.

STEP-BY-STEP

1. Setup speech/recognition engine at your computer (read below)

2. Copy CoPilot plugin files to your "Community" folder (read below)

3. Load aircraft and setup copilot usage (read below)

4. Load PMDG 737-800 with special livery. Check what you see copilot in cockpit, it animated, speak and recognize your voice command.

5. Use.

SETUP SPEECH RECOGNITION (WINDOWS 10)

Please be sure what US English language pack is already installed and English selected as Windows display language
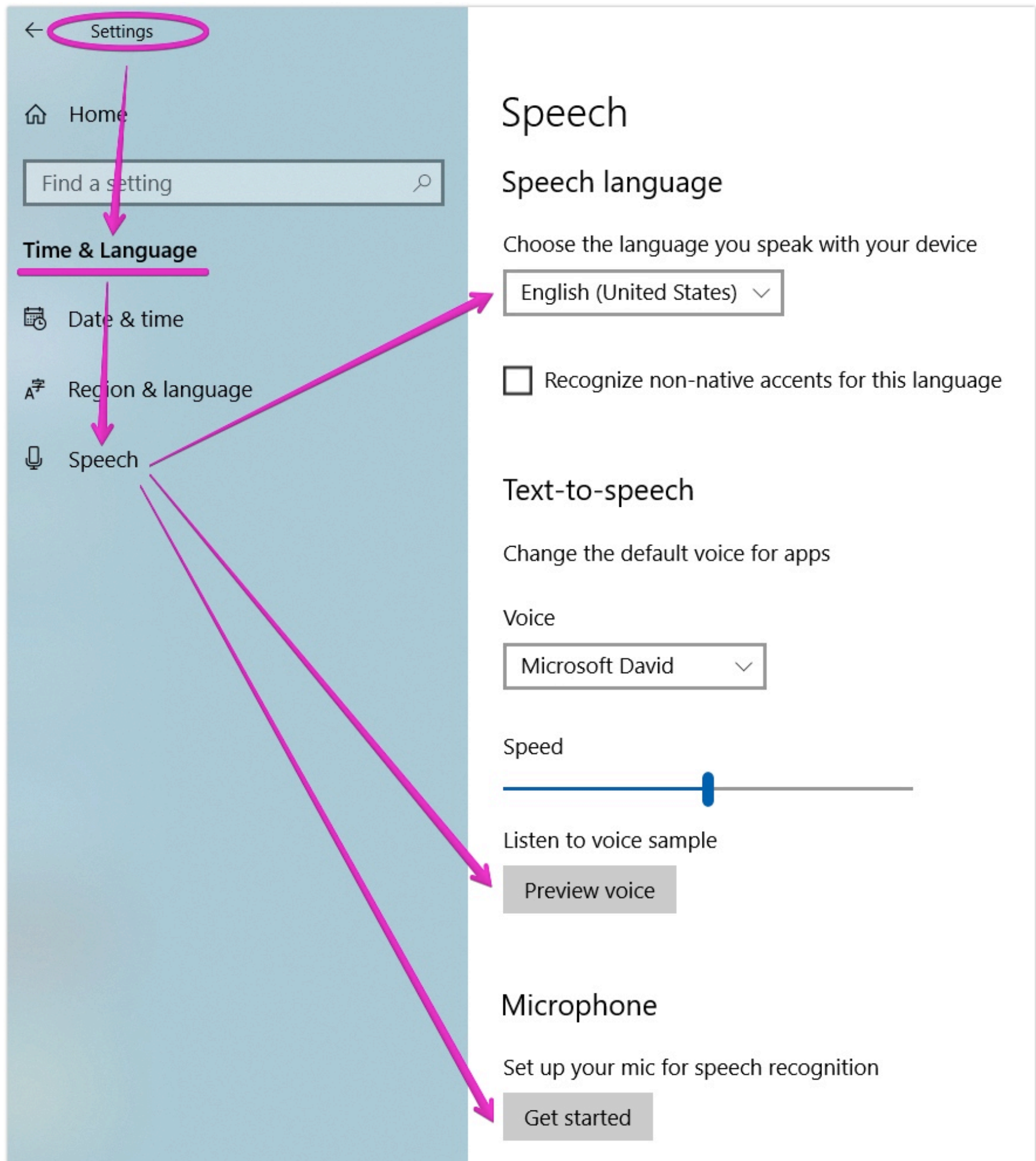
Please select English language for Recognition, run voice preview, setup microphone.
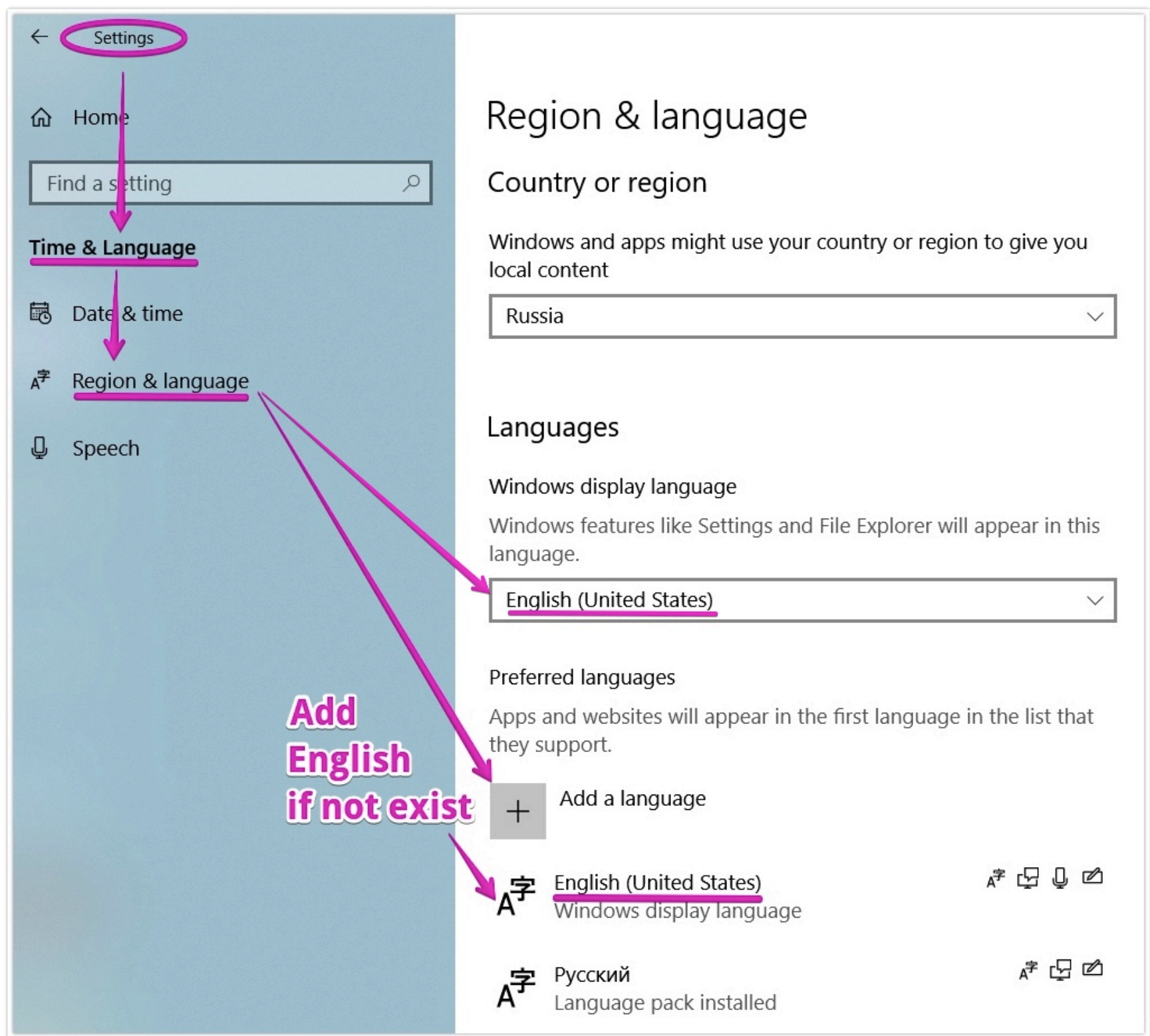
Next turn recognition On (You may skip this step if you have Non-English interface at your Windows)
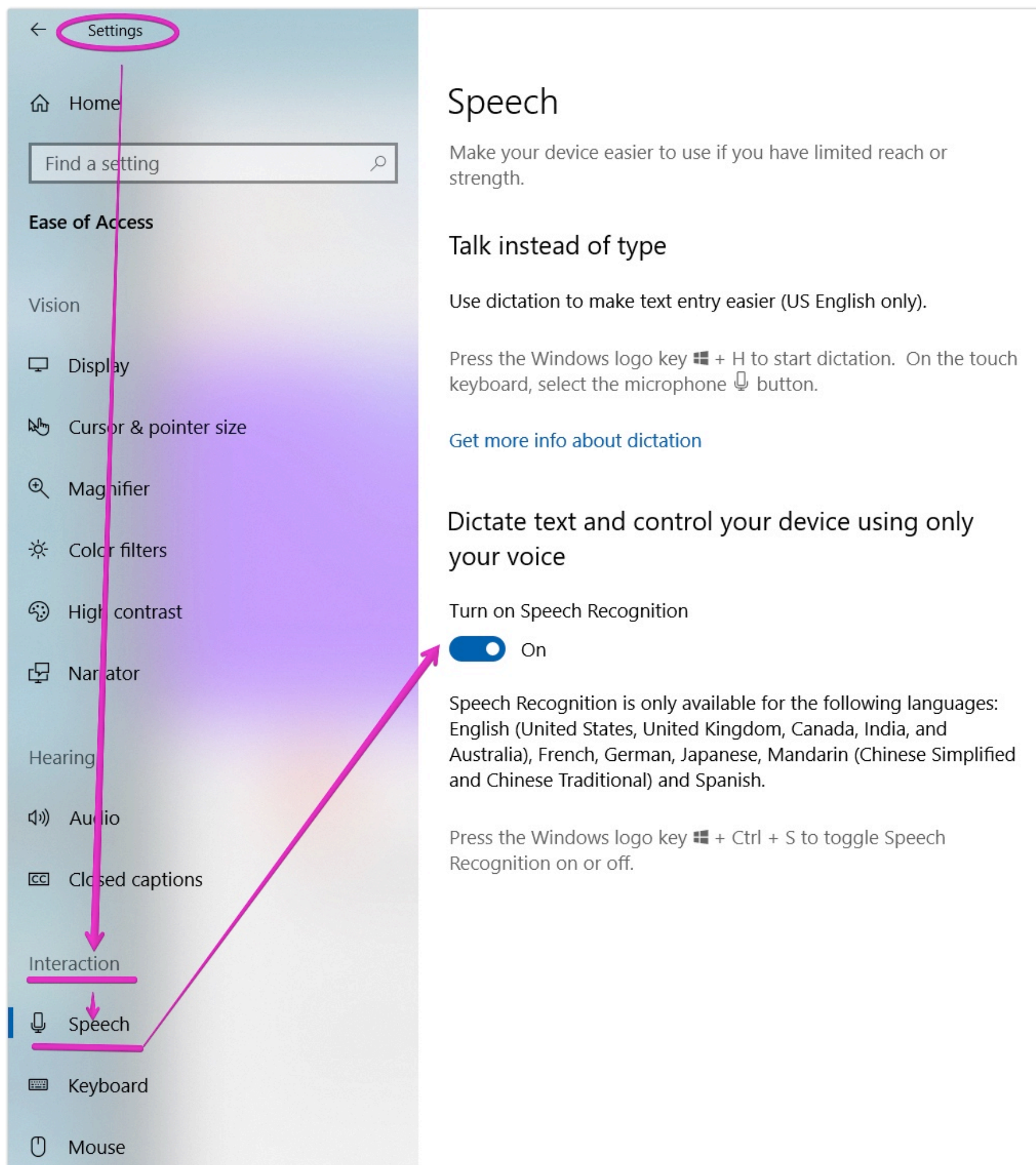
If you will get this error, you need setup English as user interface language (Windows display language) and English as your recognition language (language you speak with your device) and reload computer.
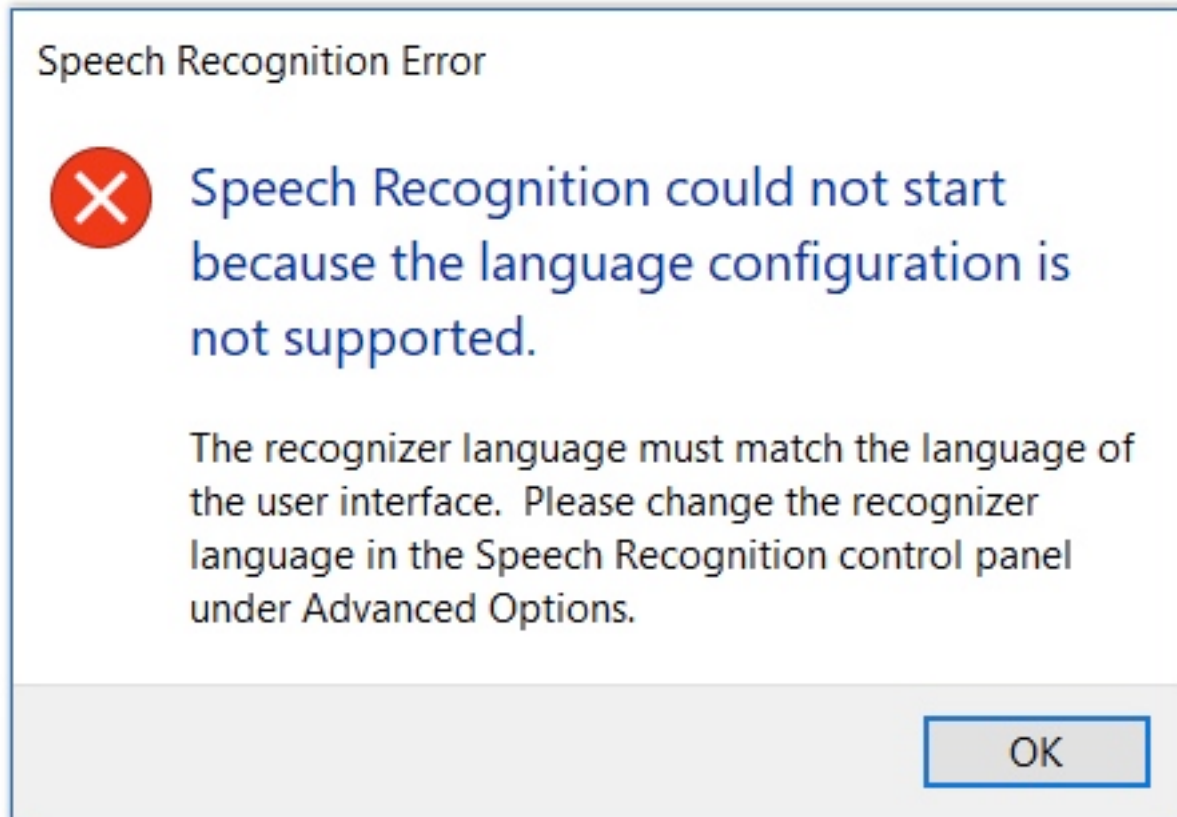
Please use this basic manual if need:

https://www.windowscentral.com/how-set-speech-recognition-windows-10

INSTALLATION

1. Find your "Community" folder.

2. UnZip copilot distributive and put all folders from ZIP pack to "Community" folder.
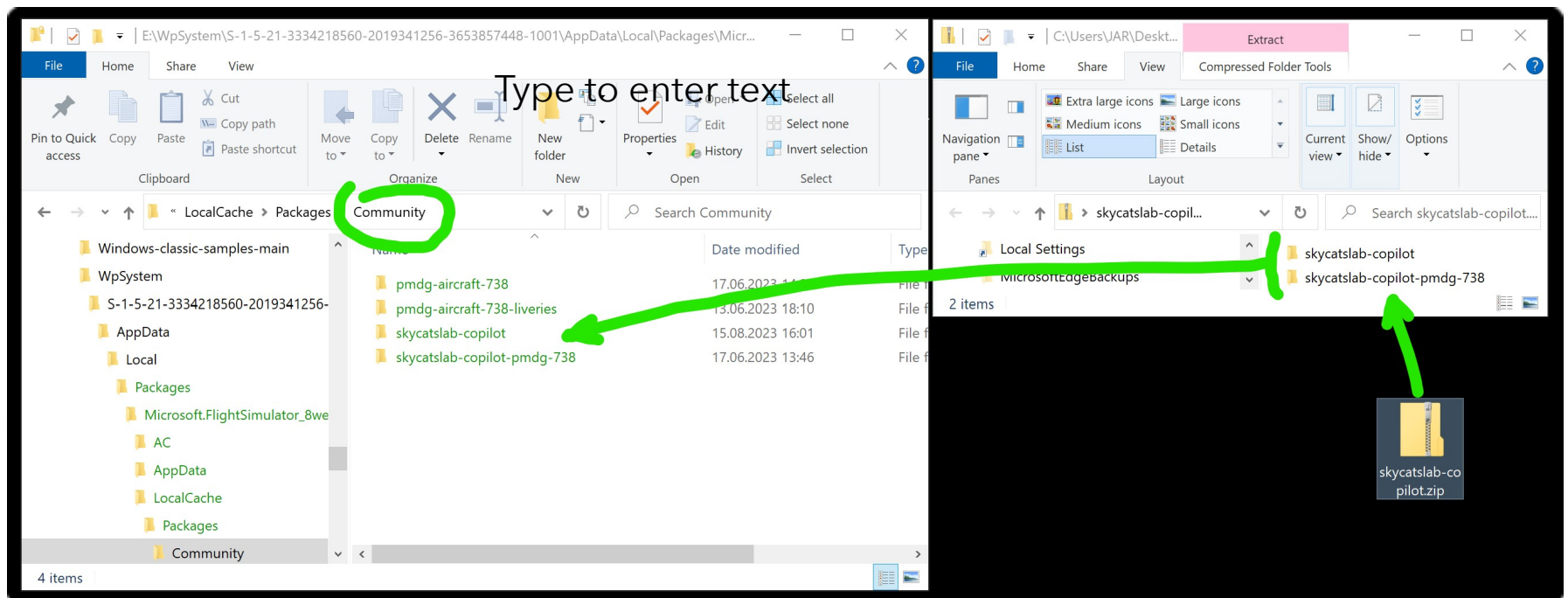
3. Run MSFS2020, open Options->General Options->MISC and set COPILOT_LINDA as CO-PILOT AVATAR.

4.Go to WORLD MAP -> AIRCRAFT SELECTION and select PMDG 737-800 model
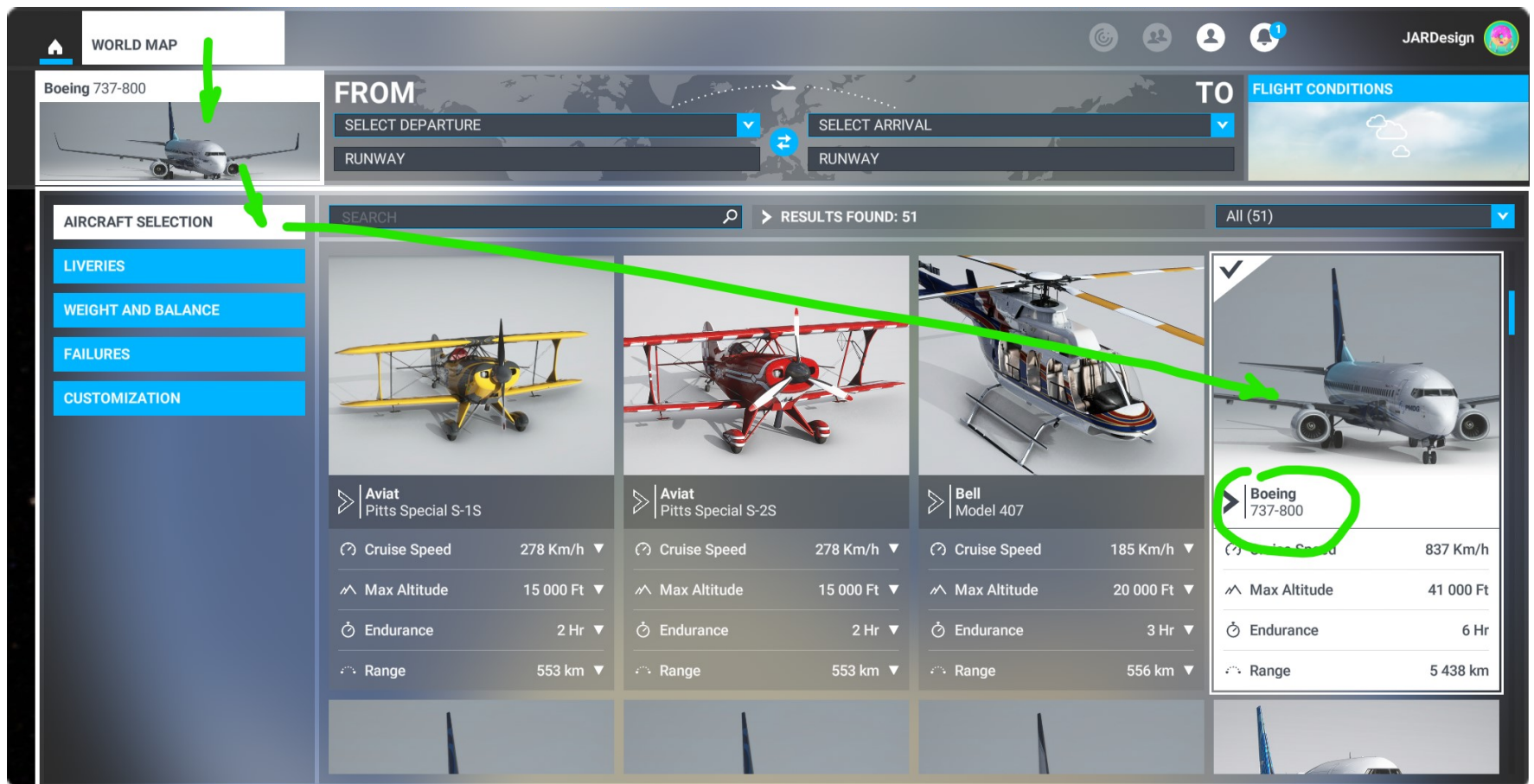
5.Go to LIVERIES selection and select special COPILOT livery.
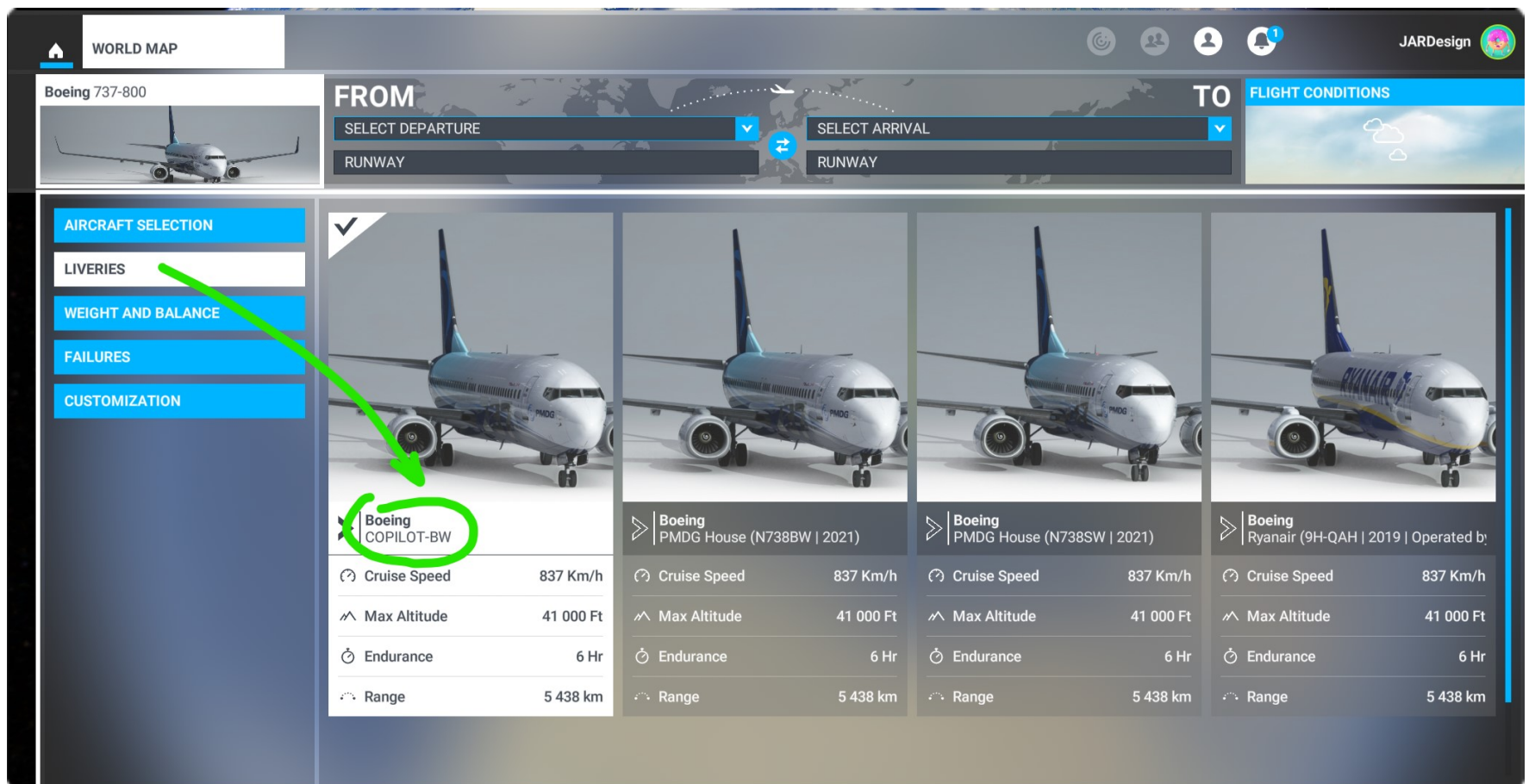
6.Load selected aircraft with selected livery and you should see copilot object in copilot seat.

7.RUN EXE FILE as Administrator

Without COPILOT_EXE file running, Linda will just seat in the cockpit with some moving and pose changes. To make it alive you need run .exe file. Please open "../Community/skycatslab-copilot/" folder, find and run COPILOT_EXE file there and back to simulator.
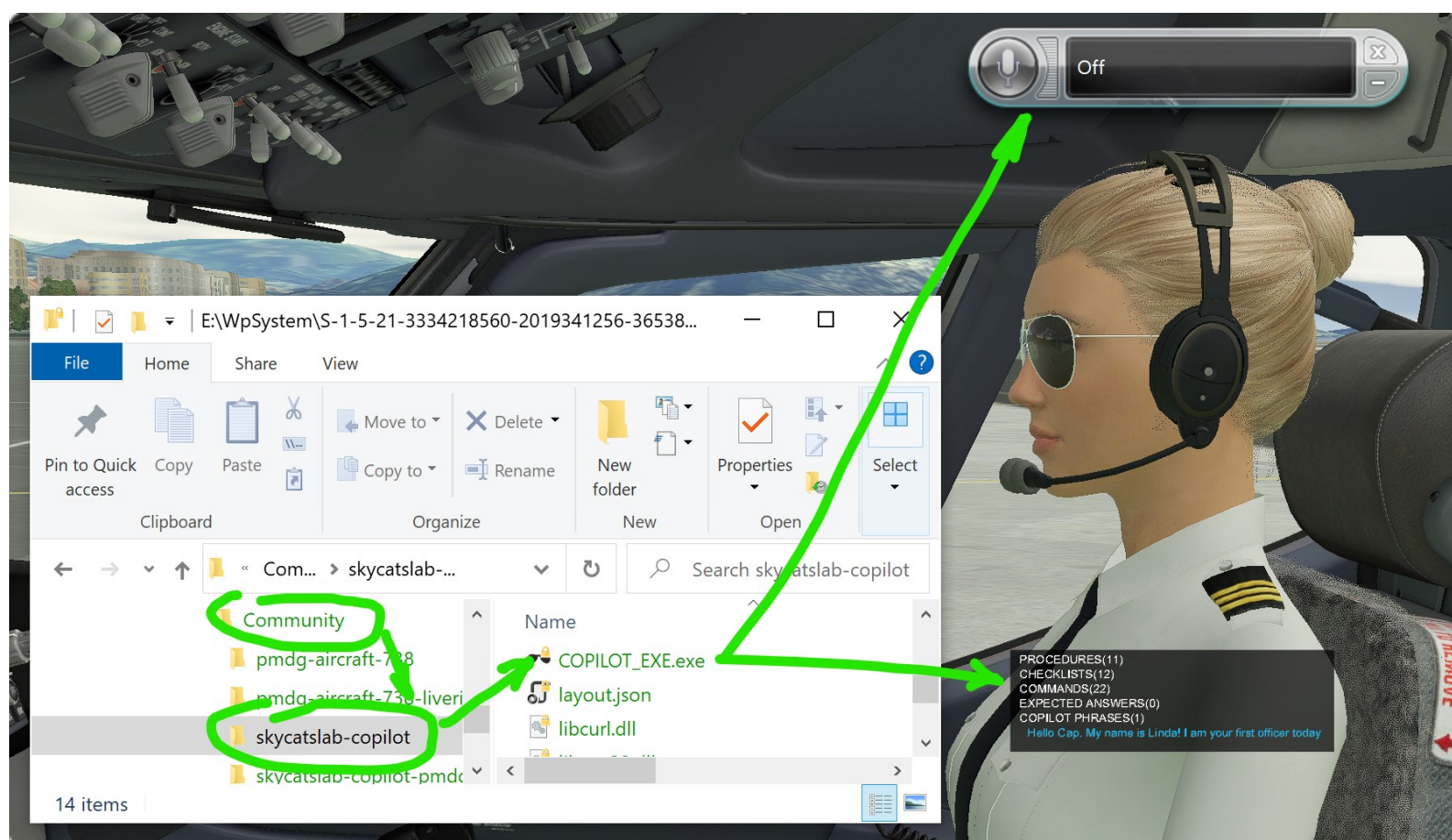
You will see speech recognition widget and copilot operation widget.

TOOLBAR USAGE
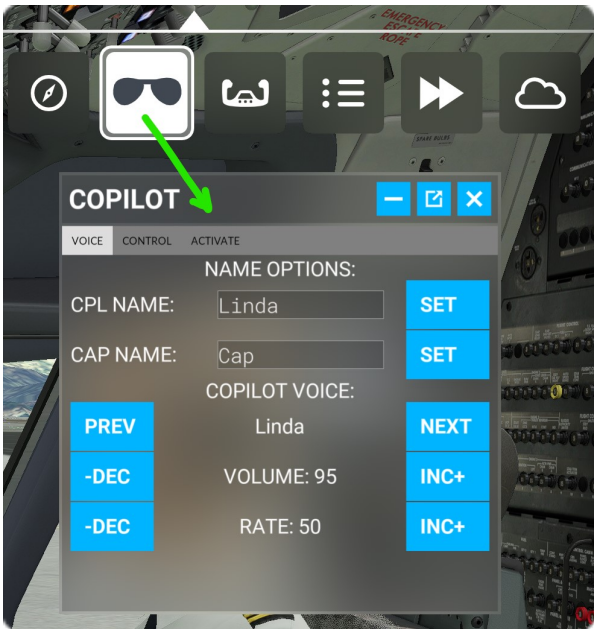
Click on copilot icon to open settings and activation tabs: VOICE > CONTROL > ACTIVATE.

On VOICE tab you may Copilot name, Your name, Copilot voice, Copilot volume and Copilot speech speed (Rate). Please click "SET" button to confirm name input.

On CONTROL tab you may switch copilot widget Off if you really not need it (use voice input only). You may select copilot "Real" option On or Off. The "Real" mode option allows the user to perform some procedures on their own, as well as fuel supply when starting the engine - this corresponds to more real procedures. You may find the list of the "Real" mode features some below.
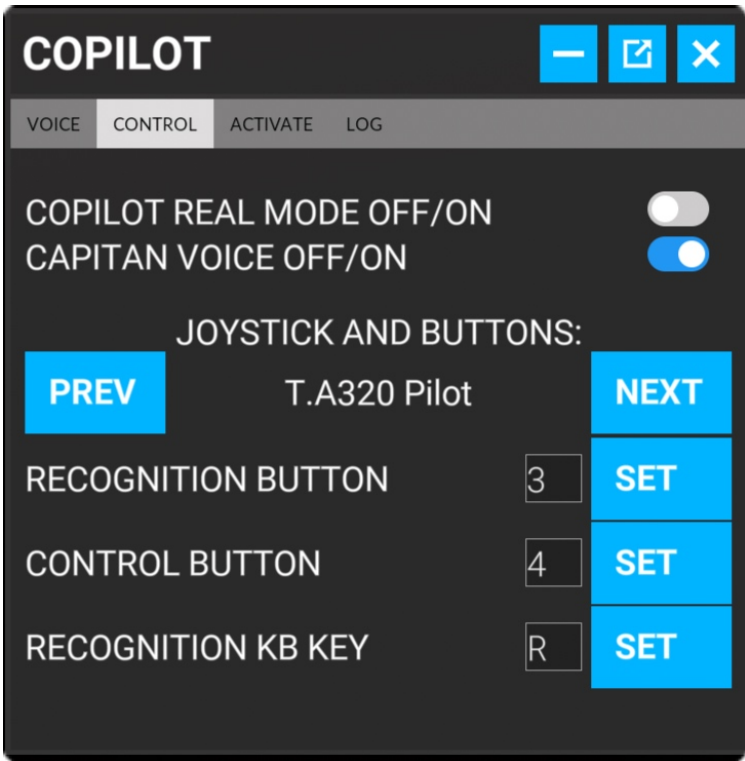
Also, on CONTROL tab you may Select keyboard key for user voice recognition, select joystick, joystick button for voice recognition and joystick button for copilot widget operation (select and confirm selected text input). On this example as recognition was selected button No3 and button No4.
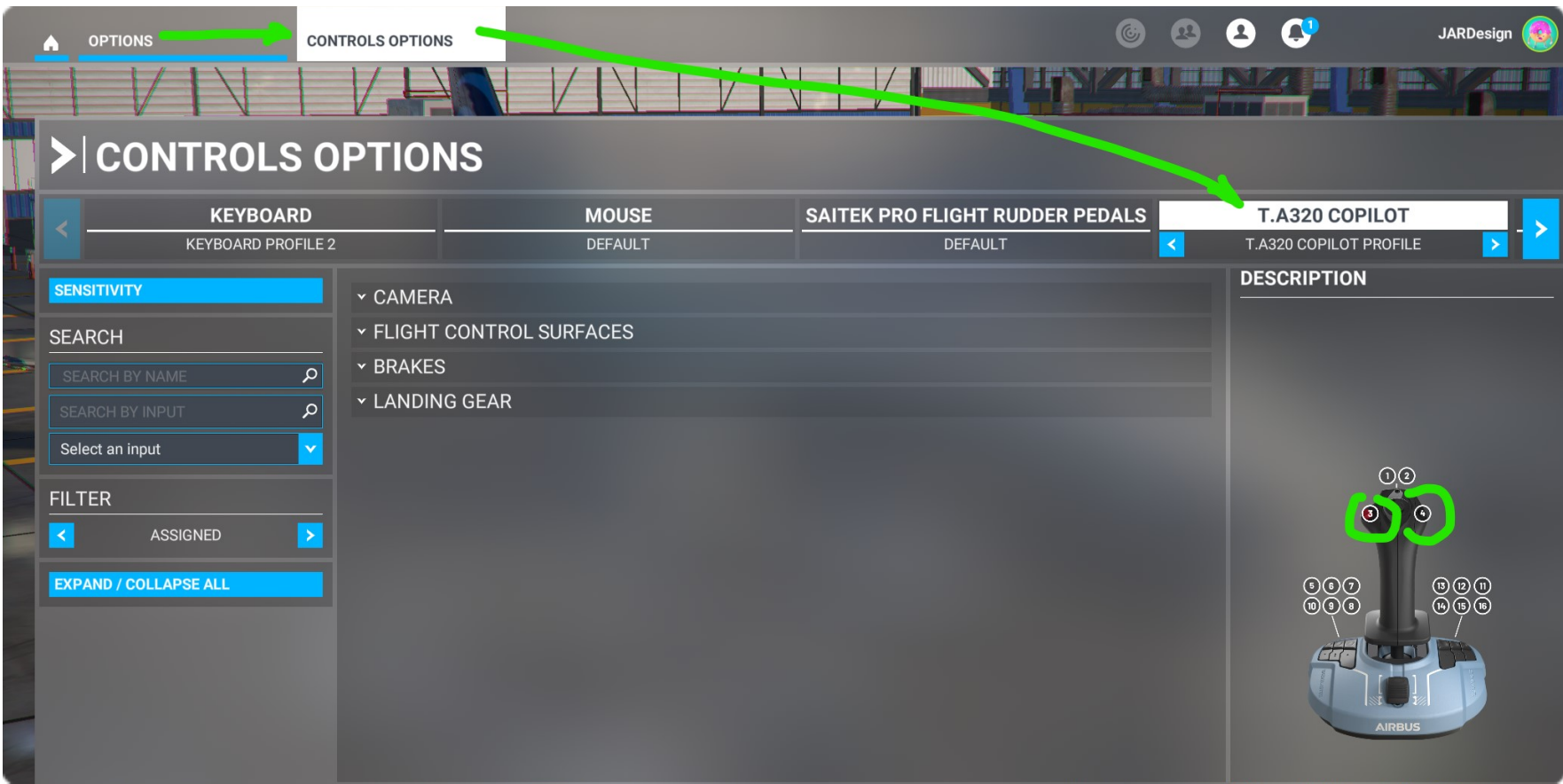
REAL MODE feature

1.Electrical power up procedure - Captain or First Officer(Normal mod)

2.Preliminary Preflight Procedure – Captain or First Officer(Normal mod)

3.Preflight Procedure – Captain(Normal mod)

4.Preflight Procedure – First Officer(Normal mod) The Captain normally does this procedure(Real mod)

5.Before Start Procedure - Captain or First Officer(Normal mod)

6.Engine Start Procedure -First Officer does this procedure(Normal mod) The Captain normally does fuel flow(Real mod)

7.Before Taxi Procedure - Captain(Normal mod)

8.Before Taxi Procedure - First Officer(Normal mod)

9.Taxi Procedure - Captain or First Officer(Normal mod)

10.Descent Procedure - Captain(Normal mod)

11.Descent Procedure - First Officer(Normal mod)

12.After Landing Procedure - Captain(Normal mod)

13.After Landing Procedure - First Officer(Normal mod) Co-pilot does not release speedbrakes(Real mod)

14.Shutdown Procedure - Captain(Normal mod)

15.Shutdown Procedure - First Officer(Normal mod)

16.Secure Procedure - Captain(Normal mod)

17.Secure Procedure - First Office(Normal mod)

On ACTIVATE tab you may enter your serial key and email, click on ACTIVATE button and some later (up to one minute) you will get activation message. Non-activated addon work in DEMO mode - all functions work until you on the ground. To operate copilot during flight you need activate it with payware serial key. Ctrl+C working there.
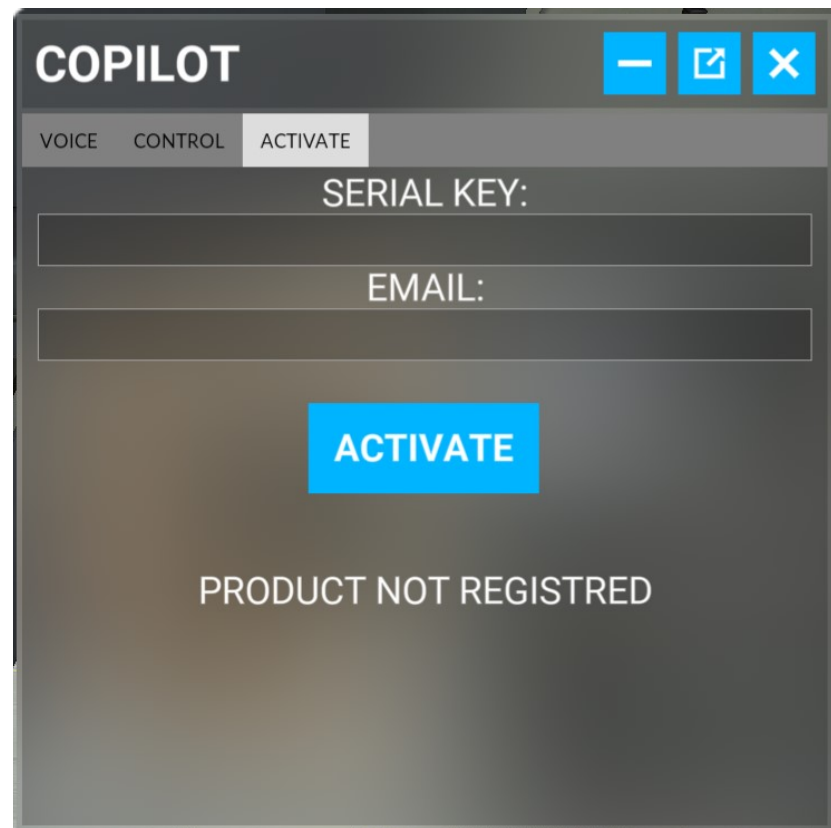
WIDGETs USAGE

For voice input - **You need** to have microphone or headset. Speech recognition should be setup and checked on your Windows settings before copilot addon installation.

For mouse click input - **You need** setup your Windows/MACOS speech settings only and skip voice recognition setup.

You may speak with CoPilot via voice or select commands via Menu or select command via widget. When you run checklist - expected answers (clickable) will be indicated in yellow.

If you prefer voice control, you need setup special joystick (sure, keyboard may be used too) button. You may look at CoPilot, hold this joystick button and say something like "Hello!" Typical pattern - press the button, say the text, release the button.

HOW TO UNINSTALL ADDON

1.Find your "Community" folder.

2.Delete all skycatslab-copilot folders from "Community" folder.

PRODUCT WEBPAGE

skycatslab.com

SUPPORT / CONTACTS

skycatslab.com

TRADEMARKS

PMDG, PMDG Simulations, PMDG Global Flight Operations, PMDG-GFO, GFO, and the PMDG Hurricane Logo are registered trademarks of The PMDG Company.

BOEING, 737-800 are registered trademarks trademark of Boeing Management Company.

MSFS is a registered trademark of Microsoft Corporation.

Annex 1. Minimum 737-800 CDU preparation CoPilot will ask/expect to be done:

1.Press L1 (FMC)

2.Press R6 (POS INIT)

3.Press cnob (NEXT PAGE)

4.Press L4 or L5 (Copy coordinates)

5.Past R4 and press R6 (ROUTE)

6.Enter L1 ICAO code airport departure (ORIGIN) and R1 ICAO code airport arrival (DEST)

7.Pres (NEXT PAGE)

8.Enter Waypoints R(1..5) and vai L(1..5) and press R6 (ACTIVATE)

9.Press button (DEP ARR) and select departure and arrival

10.Select runway and SID for departure

11.Select runway and start and transition for arrival

12.Press cnobe (RTE) and press R6 (PERF INIT)

13.Enter performance data, ZFW,RESERVES,COST INDEX,Flight level,TRANS ALT and press EXECUTE

14.Pres R6 (N1 LIMIT)

15.Reduce takeoff thrust or leave at default and press R6 (TAKEOFF)

16.Enter takeoff data, flaps configuration, center of gravity, takeoff speeds and press EXECUTE

LANDING LIMIT
OPERATING
EXTEND
RETRACT
EXTENDED
FLAPS LIMIT
-250K
2-250K
5-250K
10-200K
230K ALT FLAPS
EXTENDED

MENU
<FMC   <REQ>
<DLNK
<DFDAU
          PMDG
          SETUP>
      FS ACTIONS>

MENU
<FMC   <REQ>
<DLNK
<DFDAU   PM
          SET
       FS ACTION

INIT REF RTE CLB CRZ DES -BRT-
MENU LEGS DEP ARR HOLD PROG EXEC
N1 LIMIT FIX A B C D E
PREV PAGE NEXT PAGE F G H I J
1 2 3 K L M N O
4 5 6 P Q R S T
7 8 9 U V W X Y
. 0 +/- Z SP DEL / CLR

SPD BRK

TCAS OFF
VOR 1   VOR 2
-400   LDG ALT
1013 HPA   RNP   ANP
          DME ----   1.00   DME ----

FUEL QTY - KGS X 1000
1.25 0.00 1.25
TOTAL   2.5

POS INIT   1/3
              LAST POS
       N42°24.8 E018°43.0
REF AIRPORT
____
 GATE
____
       SET IRS POS
       000°00.0 0000°00.0
GMT-MON/DY
1123.5z 08/15

<INDEX   ROUTE>

N2
0.0   0.0
FF
OIL PRESS
OIL TEMP
13 OIL QTY 13
0.0   VIB   0.0

IDENT
MODEL   ENG RATING
737-800   26K
NAV DATA   ACTIVE
AIRAC-2308 AUG10SEP07/23
OP PROGRAM
3.00.0070-MSFS
            SUPP DATA

<INDEX   POS INIT>

Panel 1 (top):

TCAS
OFF
VOR 1 ... VOR 2

POS REF   2/3
FMC POS   GS
IRS L
IRS R
GPS L
N42°24.8 E018°42.9
GPS R
N42°24.8 E018°42.9
RADIO
N4224.8E01842.9

FUEL QTY - KGS X 1000
1.25 0.00 1.25
TOTAL   2.5

N₂ 0.0   0.0
FF
OIL PRESS
OIL TEMP
OIL QTY   13   13
VIB   0.0   0.0

MENU
<FMC   <REQ>
<DLNK
<DFDAU

SPD BRK

Panel 2 (middle):

POS INIT   1/3
                LAST POS
    N42°24.8 E018°43.0
REF AIRPORT
GATE
    SET IRS POS
    N42°24.8 E018°42.9
GMT-MON/DY
1124.6z 08/15
<INDEX   ROUTE>

Panel 3 (bottom):

RTE   1/2
ORIGIN   DEST
LYTV   LTFM
CO ROUTE   FLT NO.
RUNWAY   FLT PLAN
            REQUEST>

Image 1

TCAS
OFF
VOR 1   VOR 2
            RNP   ANP
DME ---   1.00 -.-   DME ---

1013 HPA

FUEL QTY - KGS X 1000
1.25 0.00 1.25
TOTAL   2.5

LANDIN
LIMIT
OPERATING
EXTEND
RETRACT 23
EXTENDED 320

FLAPS LIMIT
2-250K   15-1
5-250K   30-17
10-200K   230K ALT FLAP

RTE   1/2
ORIGIN   DEST
LYTV   LTFM
CO ROUTE   FLT NO.

RUNWAY   FLT PLAN
                REQUEST>

MENU
<FMC   <REQ>
<DLNK
<DFDAU
                PM
                SET
            FS ACTIO

N2

FF

OIL
PRESS

OIL
TEMP

13 OIL QTY 13

VIB

0.0   0.0

SPD BRK

Image 2

TCAS
OFF
VOR 1   VOR 2
            RNP   ANP
DME ---   1.00 -.-   DME ---

1013 HPA

FUEL QTY - KGS X 1000
1.25 0.00 1.25
TOTAL   2.5

RTE   2/2
VIA   TO
DIRECT   POD
DIRECT   LONTA
DIRECT   VELBA
P127   AYTEK
-----   -----
                ACTIVATE>

MENU
<FMC   <REQ>
<DLNK
<DFDAU
                PM
                SET
            FS ACTIO

SPD BRK

Image 3

TCAS
OFF
VOR 1   VOR 2
            RNP   ANP
DME --- FMC L 1.00 0.06   DME ---

1013 HPA

LYTV
0.5 L

FUEL QTY - KGS X 1000
1.25 0.00 1.25
TOTAL   2.5

DEP/ARR INDEX 1/1
<DEP   LYTV   ARR>
        LTFM   ARR>

DEP   OTHER   ARR
<----   ---->

MENU
<FMC   <REQ>
<DLNK
<DFDAU
                PM
                SET
            FS ACTIO

SPD BRK

Panel 1 (top):

```
        PERF INIT    1/2
GW/CRZ CG   TRIP/CRZ ALT
65.9/21.0%  FL382/FL350
PLAN/FUEL      CRZ WIND
---.-/7.5      ---/---
ZFW           I/C OAT
58.4       -65°F -54°C
RESERVES     TRANS ALT
2.0             6000
COST INDEX   PERF INIT
10           REQUEST>
<INDEX        N1 LIMIT>
```

Panel 2 (middle):

```
  ACT PERF INIT   1/2
GW/CRZ CG   TRIP/CRZ ALT
65.9/21.0%  FL382/FL350
PLAN/FUEL      CRZ WIND
---.-/7.5      ---/---
ZFW           I/C OAT
58.4       -65°F -54°C
RESERVES     TRANS ALT
2.0             6000
COST INDEX   PERF INIT
10           REQUEST>
<INDEX        N1 LIMIT>
```

Panel 3 (bottom):

```
        N1 LIMIT     1/1
SEL/OAT      RED 26K N1
+45/ +28°C   96.1/ 96.1
26K
<TO  <ACT><SEL>   CLB
24K DERATE
<TO-1            CLB-1>
22K DERATE
<TO-2            CLB-2>
27K BUMP
<TO-B
<PERF INIT      TAKEOFF>
```

TCAS
OFF
VOR 1

VOR 2

1013 HPA

TV321

(500FT)
500

0.1 R

RWP   RNP
1.00   0.06

DME --- FMC L

DME

FUEL QTY - KGS X 1000
3.75 0.00 3.75
TOTAL 7.5

53 FPS

LANDIN
LIMIT
OPERATING
EXTEND
RETRACT 23
EXTENDED 30

FLAPS LIMIT
1—250K
5—250K
10—250K ALT-FLAP
EXTEND

PANEL

UPPER DU
BRT

BACKGROUND

AFDS FLOOD

OFF

OFF

TBD DU
BRT

INBD DU
BRT

LOWER DU
BRT

TAKEOFF REF 1/2
FLAPS   QRH V1
5°   138>   138
RED 26K N1   VR
96.1/ 96.1 140> 140
CG   TRIM   V2
21.0% 5.30 146> 146
GW / TOW
65.9   65.9
RUNWAY   RWY REMAIN
RW32   RW32 ---00FT
-----SELECT
<INDEX   QRH OFF>

INIT
REF
RTE CLB CRZ DES - BRT +
MENU LEGS DEP
ARR HOLD PROG EXEC
N1
LIMIT FIX   A B C D E
PREV
PAGE NEXT
PAGE   F G H I J
1 2 3 K L M N O
4 5 6 P Q R S T
7 8 9 U V W X Y
. 0 +/- Z SP DEL / CLR

N2
0.0   0.0
FF
OIL
PRESS
OIL
TEMP
13 OIL QTY 13
VIB
0.0   0.0

SPD BRK

MENU
<REQ>

<FMC
<DLNK
<DFDAU

PM
SET
FS ACTIO

INIT
REF
RTE CLB CRZ
MENU LEGS DEP
ARR HOLD
N1
LIMIT FIX   A B
PREV
PAGE NEXT
PAGE   F G K
1 2 3 K L P
4 5 6 P Q U
7 8 9 U V Z SP
. 0 +/- Z