



**\*Version 2\***

## T-6 Installation and Setup Guide



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## **\*\*Special Notes:**

**1) If you purchased X-Plane from Steam, you must extract the T-6 zip file to the desktop, and then move that extracted folder into the Steam X-Plane aircraft folder for it to copy correctly. (If you extract directly into the Steam folder, for some reason, it blocks our custom plugins and the plane won't work right.)**

**2) If using X-Plane 12, please install OpenAL runtime.**

**Update steps:**

**Install the OpenAL runtime for Windows by running the Windows installer here: <https://www.openal.org/downloads/>**

**Be sure to back up any custom data files (com/nav presets, FlightPlans, etc) Extract to desktop, then copy to X-Plane Aircraft Folder)**

**NOTE: YOU WILL NEED TO USE THE X-PLANE EXPERIMENTAL FLIGHT MODEL FOR THIS AIRCRAFT. Check the “Use Experimental Flight Model” box from the X-Plane Settings – General Options page.**

**NOTE: T-6B users, unless otherwise noted, all of these instructions can apply to the Bravo model as well. In the case of any command names or function names, just look for the T-6B version instead of T-6A.**

## 1. Installation

### 1.1 Installing The Aircraft

To install, extract the T-6 folder from the T-6 zip file into any one of the sub-folders in the X-Plane/Aircraft folder. You could use this structure as an example:

- X-Plane 11\Aircraft\Military\Trainers\T-6A Texan II

### 1.2 Installing and Updating the GPS Navigation Data (T-6A only)

The GPS uses data compatible with Navigraph. Open the zip file “KLN900Navdata.zip” and extract the “KLN900 Navdata” folder into the main X-Plane folder so that you have this resulting folder structure:

- X-Plane 11\KLN900 Navdata\

[See this thread for detailed information on updating the GPS Navigation Database.](#)

You will need to purchase the latest dataset from [Navigraph](#) for this to work. Go to the [Navigraph web site](#) and click the [Navigraph FMS Data link](#).

When using the GPS, there are a couple of things to note that are different from the real GPS. The first has to do with simulation settings. See section 6.3 in the KLN90B X-Plane Manual. Set the GPS to FAST if you don't want to wait several minutes for it to acquire satellites. Also set the HSI to <--> so that it works correctly with the T-6.

If you wish to have flight plans saved in the KLN 900, you must create the following folder:

- X-Plane 11\Output\FMS Plans\KLN 900\

### 1.3 Installing the Smart Copilot Plugin

If shared cockpit functionality is required, you will need to download the Smart Copilot plugin which is available here: <https://sky4crew.com/smartcopilot/>

This web site contains instructions on how to install the plugin and how to setup the networking between the two computers that will be used for the front and back seat.

## 2. Registration

The first time you open the T-6 in X-Plane, a window will pop-up asking you to register. Select the Internet Registration option and type in the key sent to you to activate the T-6. You will have to re-open the aircraft after registration is complete.

### 3. Setup

There are several T-6-specific commands which must be mapped to keys or throttle/joystick commands as desired. See section 3.1 on mapping the commands to keyboard keys and see section 3.2 for mapping commands to your controls.

**NOTE: The T-6 must be loaded as the current aircraft in order to bind any buttons or keys to commands. You must start a new flight first before attempting these instructions. X-Plane will remember these bindings every time you load the aircraft.**

#### Required Commands

The ones of interest are:

- Toggle Gear Up or Down - use this instead of the X-Plane gear toggle command. The landing gear will not function correctly if this command is not used. You may also click the landing gear handle in the cockpit if you prefer. There are also distinct Landing Gear Down and Landing Gear Up commands you may bind.
- Rudder Trim Left/Right – use this instead of the X-Plane rudder trim command as the plugin TAD function needs to control rudder trim and the user input is added in addition.
- Key Command Menu - to set T-6 preferences, to configure the custom throttle, and to show the electrical bus status values.
- Engine Cutoff to Start to Idle - Advance (if not using a throttle with detents)
- Engine Cutoff to Start to Idle - Back (if not using a throttle with detents)
- Engine Cutoff – If using the VR throttle, mouse, or keyboard
- Flaps Land – If using the T-6 custom throttle, map this to the flap lever in landing position.
- Flaps Takeoff – If using the T-6 custom throttle, map this to the flap lever in takeoff position.
- Flaps Up – If using the T-6 custom throttle, map this to the flap lever in up position.
- Trim Interrupt – recommend mapping this to a joystick button as outlined in section 3.2.
- TAS Range Select - recommend mapping this to a joystick button as outlined in section 3.2.
- TAS Proximity - recommend mapping this to a joystick button as outlined in section 3.2.

#### Optional Commands

Other commands are optional such as “Toggle Emergency Gear Lever”. You can assign a key or joystick button to this command if you wish or you may simply click the control in the cockpit. The list of optional commands follows... there are also ones for most switches that you can find in the X-Plane command list not listed below,:

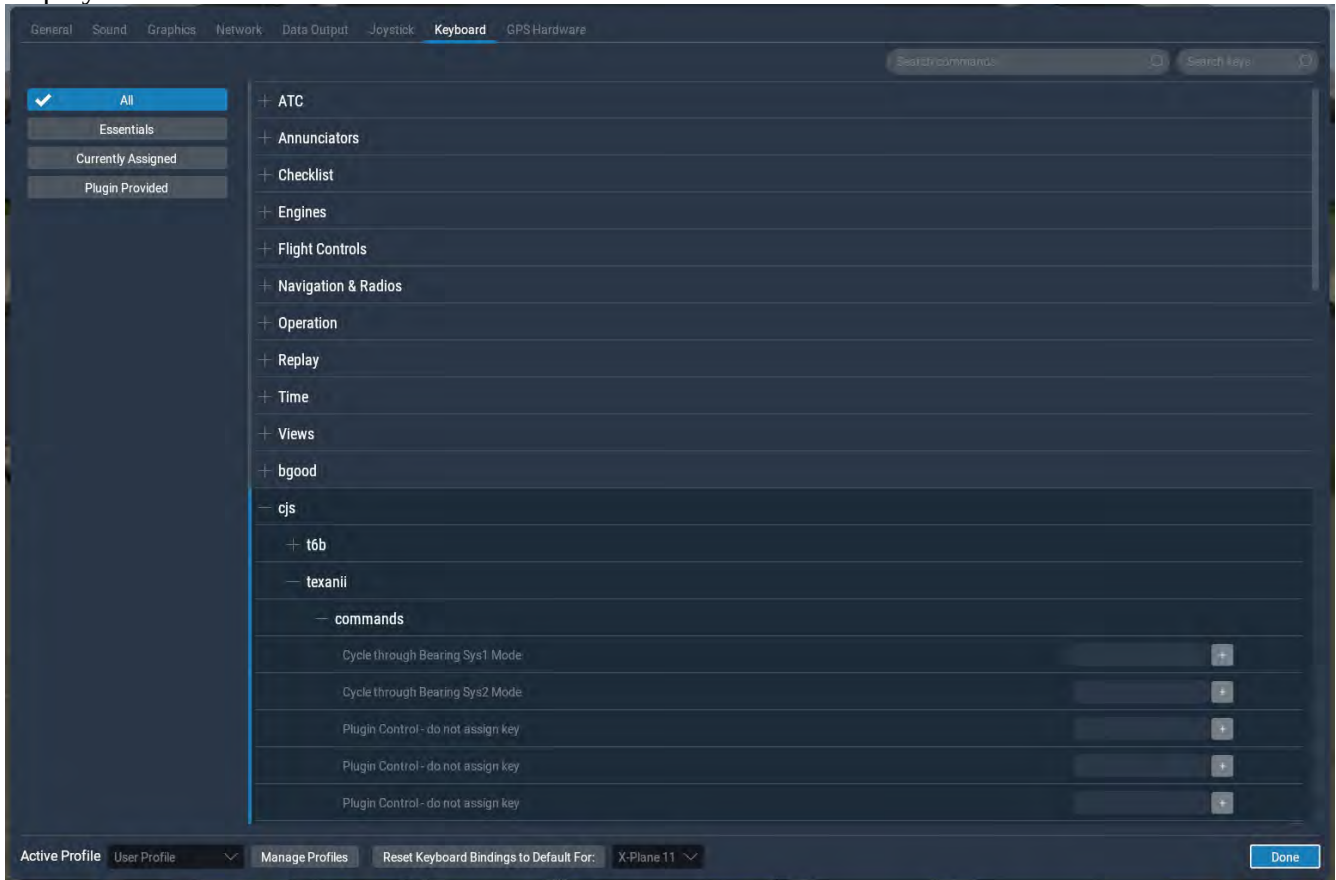
- Cycle through Bearing Sys1 Mode
- Cycle through Bearing Sys2 Mode
- Toggle Emergency Gear Lever
- Master Caution Accept
- Master Warning Accept
- Toggle Between Nav and GPS mode
- Silence Gear Horn
- Reset Failures – Useful key instead of having to reset them from the Key Command Menu.
- Move to Rear Seat

## Plugin Commands

Note that all other commands are used by the plugin and will be noted as such (Plugin Control) and should not be used by the user.

### 3.1 Mapping T-6 Commands to Keys

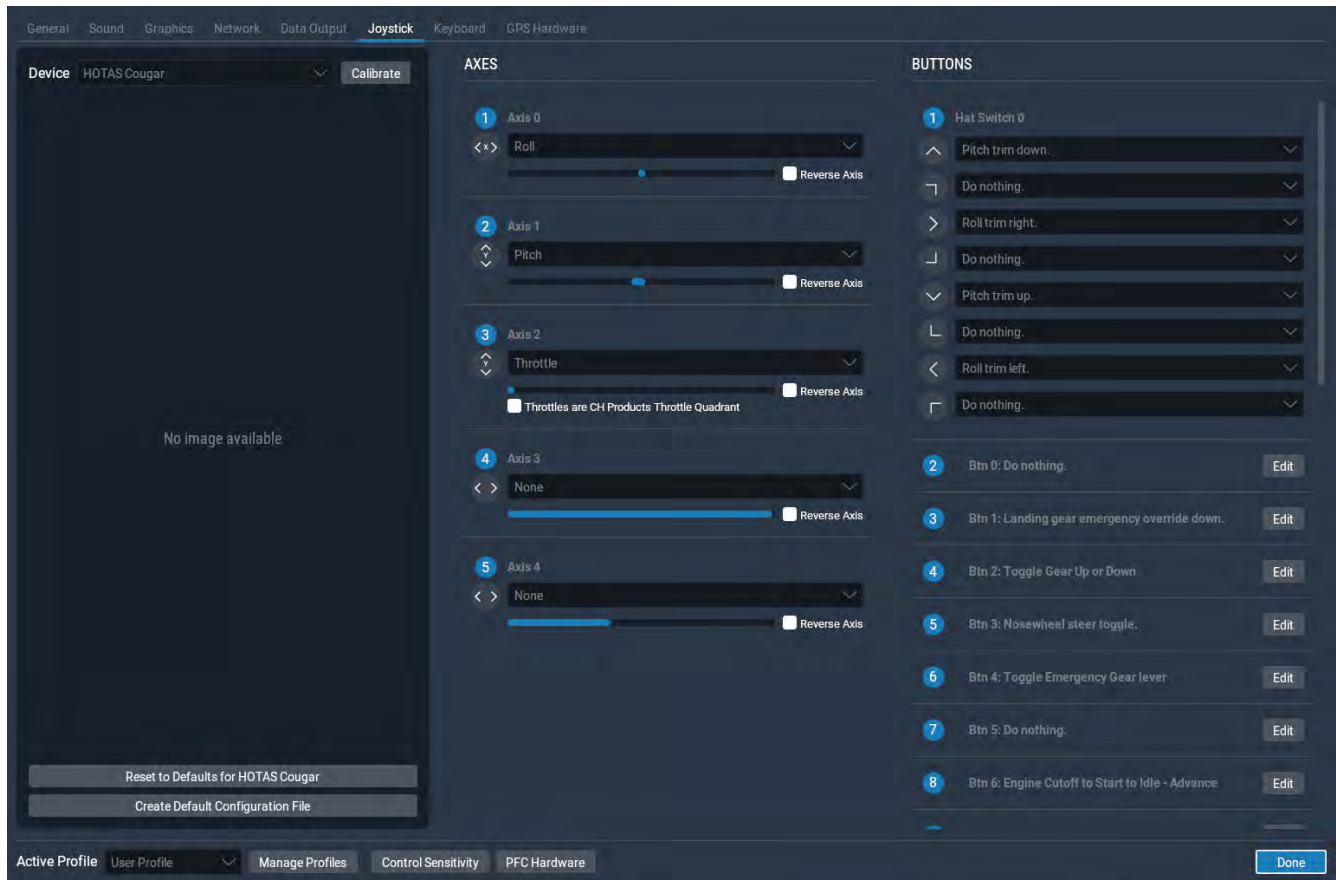
Go the X-Plane settings menu. From there, click the Keyboard tab on the top. Several menu items get displayed below as shown below:



Click on the "+" sign next to the "cjs" option. Then click on the "+" next to the "texanii" option and then click on the "+" next to the "commands" option. This displays a list of all the T-6 commands.

### 3.2 Mapping T-6 Commands to Throttle and Joystick Buttons

Go the X-Plane settings menu. From there, click the Joystick tab on the top. On the left side of the menu is a drop-down box which has control devices plugged into your computer. Select the device that you want to assign buttons to. Several menu items get displayed on the right side of the menu as shown below:



On the bottom right side of the menu you will see a list of buttons available for your control. Pushing a button will cause the button to light up on this menu so you can identify the button you are pressing. Select a button that you wish to map a T-6 command to and click the “Edit” button next to it. A list of all available X-Plane and T-6 commands will be displayed. Scroll down through the list until you see the “cjs – texanii – commands” and select the desired one to map to your button.

Some default X-Plane commands that you might want to map to your joystick/throttle buttons are as follows:

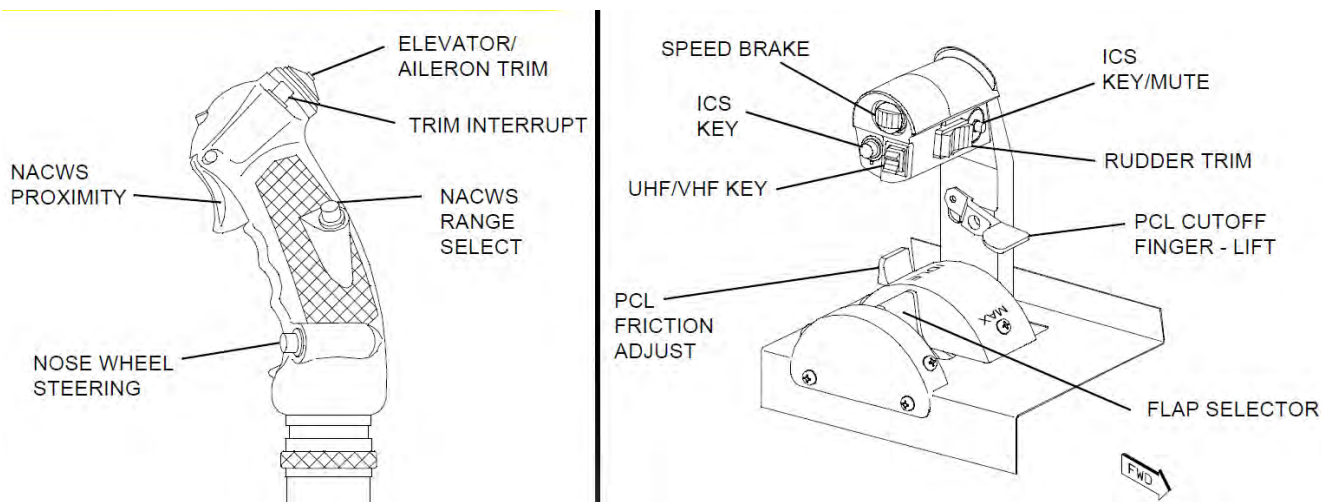
### Joystick

- elevator/pitch trim – map the pitch and roll trim to the joystick hat if available
- trim interrupt - “cjs – texanii – commands – Trim Interrupt”
- nose wheel steering – “Flight Controls – Basics – Nosewheel steer toggle”
- TAS/NACWS range select - “cjs – texanii – commands – TAS Range Cycle”
- TAS/NACWS proximity - “cjs – texanii – commands – TAS Proximity”

### Throttle

- speed-brakes extend – “Flight Controls – Basics – Speed Brakes extend full”
- speed-brakes retract – “Flight Controls – Basics – Speed Brakes retract full”
- rudder trim – “Flight Controls – Trim – Yaw Trim Left & Right”.
- flaps down – “Flight Controls – Basics – Flaps down a notch”
- flaps up – “Flight Controls – Basics – Flaps up a notch”
- UHF/VHF Key (UHF) - “Navigation & Radios – Audio Panel – Transmit audio: COM2”
- UHF/VHF Key (VHF)- “Navigation & Radios – Audio Panel – Transmit audio: COM1”

The T-6 controls are shown below and it is suggested to map the buttons to the appropriate X-Plane commands.



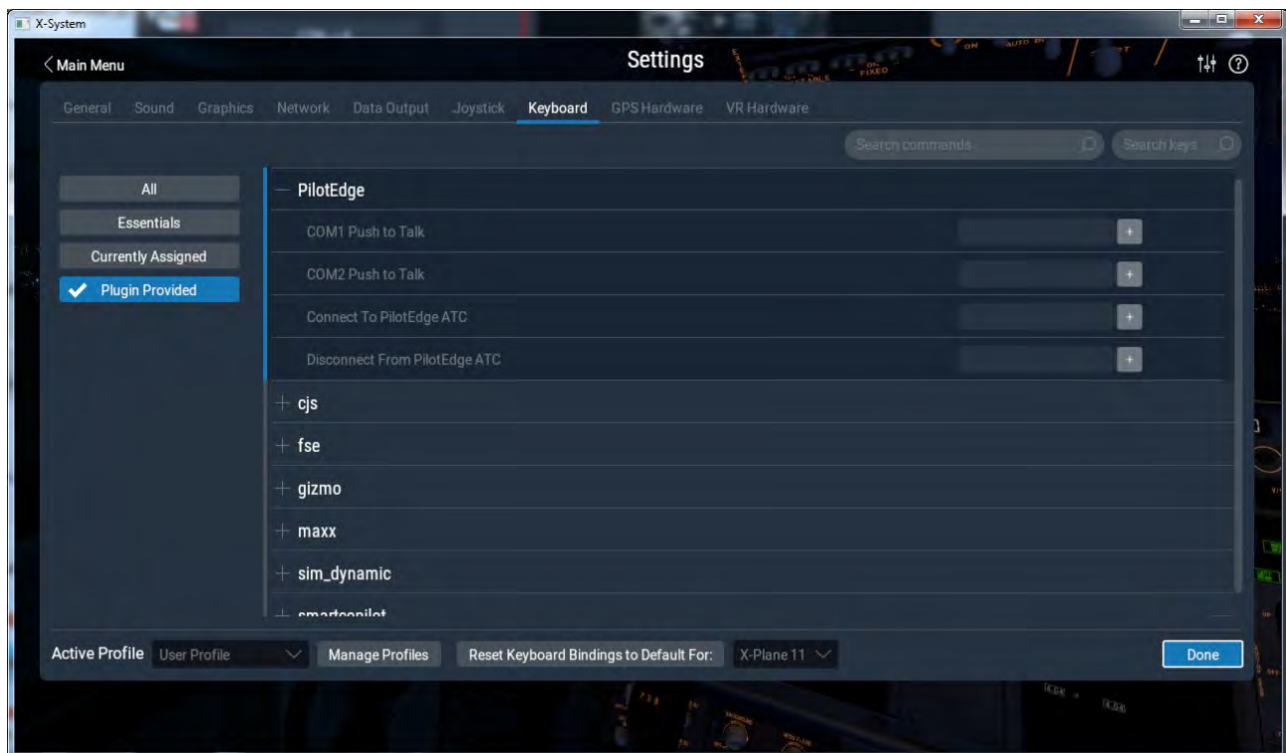
### 3.3 PilotEdge Setup

PilotEdge is a program that allows the user to interface to an online ATC system and talk to real online ATC controllers so you can fly in a realistic ATC environment. PilotEdge is available here:

<https://www.pilotedge.net/>

To get the T-6 to work with PilotEdge, there are a few configuration steps as listed below.

1. Install PilotEdge following the instructions on their web site.
2. You should map some keys required by PilotEdge to your controls or keyboard as described in sections 3.1 and 3.2 above. Search for the PilotEdge datarefs. These are a list of the PilotEdge-provided commands shown on the key mapping menu.



### 3.4 Control Sensitivity

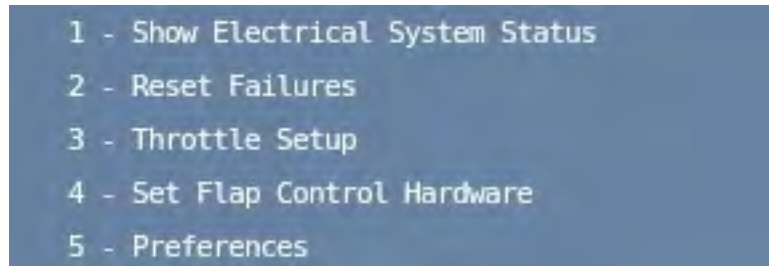
From the Joystick menu shown above, click the “Control Sensitivity” tab on the bottom of the menu. This screen will appear:



From here, set your controls sensitivity as desired. We recommend higher values for all pitch and roll settings (up to 100%) as consumer control sticks are extremely sensitive.

### 3.5 The Key Command Menu

Once you define a key for the key command menu as outlined in the previous section, press that key to activate that menu which appears in the top right corner of the screen. You will see a display pop-up as follows:



Pressing the key again exits the menu. Use the backspace key to go back to the previous menus once navigating down into the various sub-menus. Four main options are displayed as follows:

1. Show Electrical System Status - shows the status of all the electrical buses in the aircraft
2. Reset Failures - select this option to reset custom T-6 failures such as hot starts, use of the emergency gear lever, clear engine fires, etc. You may also associate a key to the “Reset Failures” command.
3. Throttle Setup
  - Throttle setup when **using a throttle with detents**: Set the Mode to "Throttle Control with Detents". Next set the Idle and Start Positions by selecting options 2 and 3. Move the throttle to the start position and then adjust the Idle Throttle Position value up or down using the +/- keys until it matches the desired throttle position. Do the same for the start position.
  - Throttle setup for **using a throttle with no detents**: Set the Mode to "Throttle Control without Detents". When using this mode you have to use the commands you defined in section 3 to move the throttle between the cutoff, start and idle states.
  - Throttle setup when **using the VR throttle, keyboard, or mouse**: Set the mode to VR Throttle/Keyboard/Mouse. In this mode when starting the plane you can move the throttle from cutoff to start to idle using the control. Once the plane is started however, moving the throttle back all the way will only result in the throttle going to the idle position. You have to use the Engine Cutoff command you defined in section 3 to shutdown the engine.
4. Set Flap Control Hardware – Use the “Standard X-Plane Flap Control” option unless you have a Bugeye controller that has separate buttons for flap positions and for that use the “2 Button Flap Controller” option. For the latter make sure to assign the flap buttons to the commands  
Flap Control - Button 1 - `cjs/texanii/commands/2_button_flap_controller_button_1`  
Flap Control - Button 2 - `cjs/texanii/commands/2_button_flap_controller_button_2`
5. Preferences – you can configure the aircraft so that it can be flown from the back seat or turn on/off ambient sounds from here. You can also turn on Mr. Magoo mode which increases the font size of some elements on the RMU, the torque reading, the airspeed indicator digits and the pitch ladder digits.

### **3.6 Configuring the HUD (T-6B Only)**

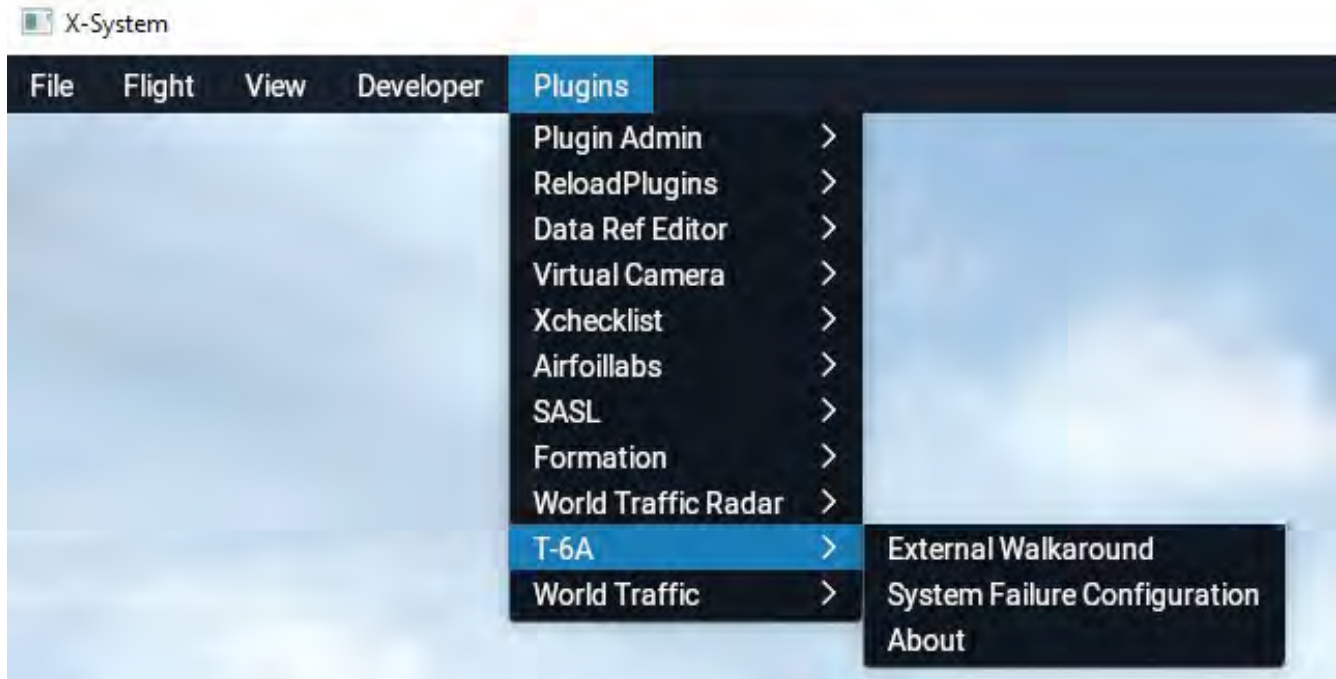
At the moment in the T-6B, the HUD is configured to run as the F-16 HUD running in NAV mode. Changes will be made in the release version so that the HUD can be configured through the UFCP and will support all valid modes of operation.

Press the F12 key to bring up the HUD settings menu. This menu has two options:

- HUD Controls
  1. Mode – fixed to NAV
  2. Scales Switch – cycles through the HUD scales tapes options
  3. FPM Switch – cycles through the HUD Velocity Vector display modes
  4. Velocity Switch – cycles through velocity display options (CAS/TAS/GS)
  5. Altitude Switch – cycles through altimeter display options (AUTO/BARO/RADAR)
  6. Brightness Switch – DAY/NIGHT/AUTO
  7. Set Color – Green/White/Red/Black
- Display Settings
  1. HUD Vertical Position – allows you to center the HUD vertically... adjust so that the HUD horizon line is on the real horizon. Best to set on a flat airport facing the ocean, eg. KLAX
  2. Horizontal Offset – allows you to center the HUD horizontally if required. This may need to be reset if the monitor screen resolution is changed.
  3. HUD R/G/B Colors – If the HUD color is set to Green as in option 7 for HUD Controls described above, you can adjust the R/G/B components if you prefer a different tint of green or a completely different color.

### 3.7 External Walk-around

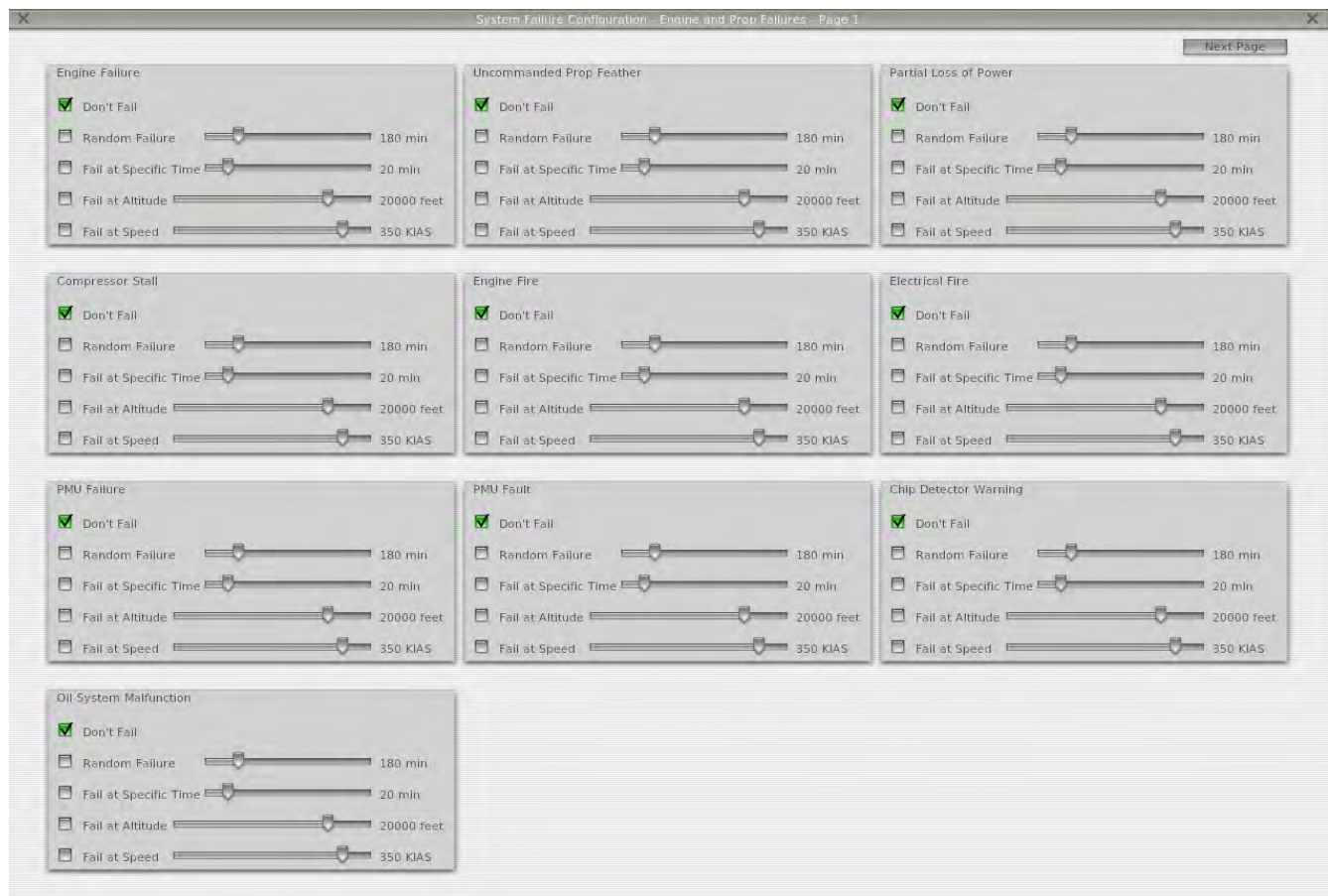
The first of many checklists to be implemented is the external walk-around.



With the aircraft parked on the ramp, select the “X-Plane – Plugins – T-6A- External Walkaround” option. You will be moved around the aircraft and various checklist items are displayed corresponding to those described in the aircraft manual. You can also view the walkaround in this [video](#).

### 3.8 System Failure Configuration

Select the “X-Plane – Plugins- T6A – System Failure Configuration” menu option to display the Failure Configuration menu.



A future update will include most of the failure scenarios as outlined in the Emergency Procedures section in the NATOPS and Dash-1 manuals. For now 3 pages of failure options are available for engine/prop failures, electrical system failures, and avionics failures. You may select one or several and the procedures outlined in the aircraft manual can be followed to rectify the situations where applicable. Failures may be configured as follows:

- Don't Fail – Check this box to disallow this failure.
- Random Failure - Check this box and set the slider as desired. A failure will occur for this system at any time between now and the time set by the slider.
- Set as Specified Time – Check this box and set the slider as desired. A failure will occur at the specified elapsed time from when this box was checked or the slider value adjusted.
- Fail at Altitude – Check this box and set the altitude slider as desired. A failure will occur as the aircraft climbs through this altitude.
- Fail at Speed – Check this box and set the speed slider as desired. A failure will occur as the aircraft exceeds this airspeed.

To clear any of the failures, un-check the appropriate boxes and select the “Clear Failures” options from the key command menu as outlined in section 3.4

### **3.9 The About Menu**

Select the “X-Plane – Plugins- T6A or B – About” menu option to display the “about” information. This will display the current version of the software in use and will also let you know if your product is registered or not.

## **4. Running the T-6**

To start the T-6 in X-Plane, you can now follow the startup procedures as outlined in the NATOPS or Dash 1.

### **4.1 Starting the Aircraft**

First turn on the battery switch on the right side console. Make sure that the generator switch is OFF. When the aircraft is off, the current throttle position is displayed in orange text in the center-left of the screen. Move the throttle to the start position. Use the commands you mapped above for "Engine Cutoff to Start to Idle - Forward" if you're using a throttle without detents, and you will see the “ST\_READY” annunciator light up when the throttle is in the start position. The throttle in the 3D cockpit will move so you can verify visually what the position is. Pressing the starter button forward will engage auto-start and once the engine is running you can move the throttle to the idle position and turn on the generator, avionics and GPS.

### **4.2 Shutting Down the Aircraft**

Move the throttle from to cutoff position. Use the command you mapped above for "Engine Cutoff to Start to Idle - Back" if you're using a generic throttle, to move the throttle to the cutoff position. If using the VR throttle, mouse or keyboard, use the “Engine Cutoff” command. Turn off the battery, generator and lights as required.

### **4.3 General Operation**

It is assumed that the users of this application will have access to the appropriate NATOPS or Dash-1 manuals. The procedures outlined in these manuals can be followed for the T-6. All primary systems are completely functional. The aircraft electrical system is fully modelled along with the circuit breakers. All start modes work so you can perform automatic, user-monitored, or air starts. Hot starts can occur if the throttle is advanced beyond the start position with the boost pump on and the engine off before a start is performed. If doing an automatic start, the start will be aborted if the ITT high limit is exceeded.

## 4.4 Optimization and Frame Rates

The T-6A/B and associated plugin code is designed to be easy on frame rates with a relatively low-polygon model and extensive use of state-driven code. The biggest frame rate hit comes from using the X-Plane camera for the rear-view mirrors. To turn this off and use just a shiny surface (which gives sort of a blurry image of behind) in place of the camera, just click on the mirrors. The camera doesn't show things like clouds so until X-Plane has some support for mirrors, neither solution is optimal so pick which one you prefer.

## 5. Notes on Using Smart Copilot

These are some extra steps required to fly with the shared cockpit functionality of Smart Copilot.

- To use the shared cockpit for simultaneous operation of the front and rear cockpits on two networked computers, make sure that the Smart Copilot plugin was installed as detailed in section 1.3.
- For the PC that is running as the rear cockpit, make sure you set the preference “Fly from Back Seat” to “ON”. See section 3.4 for more info. You must reload the aircraft anytime this setting is changed.
- Make sure that both throttle setups are the same on both PCs. For example if you have the throttle mode set to “Use Throttle Position for Fuel Cutoff and Start” on one PC, the other PC must use the same setting and the idle and start detent positions must be configured the same. See section 3.4 for more info.
- Make sure that the Smart Copilot GUI Interface is turned on from the Smart Copilot plugin menu. There is an option to take control that whoever wants to fly needs to click when they want to fly. Whoever is flying manages both the controls and the throttles; they can't be managed separately.
- Failures can be set from either cockpit so an instructor in the back seat can fail systems for the student in the front seat to handle or failures can be set from the front seat for an instructor in the back seat to handle. And of course you can set your own failures if not using the shared cockpit.

## 6. Contact Us

Please contact us for support or if you find any issues that need to be fixed or improved with the aircraft. Thanks for purchasing our T-6!

Our web site is: <https://www.fliteadvantage.com/>

We also are available directly via our Discord Server: <https://discord.gg/HBCDMtt>