1. Overview

2. Installation
   2.1. Distribution
   2.2. Installation
   2.3. Pause on task switch
   2.4. Dynamic lighting
   2.5. SimConnect

3. Operations
   3.1. Starting the application
   3.2. Main Window

4. Kneeboard Editor

5. In-Sim controls

6. Disclaimer
1. Overview

The Lorby-SI TugDriver is a simple application that allows you to push back AI aircraft using any ground vehicle. A pushback tug model is included in the app.

Lorby TugDriver will only work with scheduled AI traffic (BGL flight plans). Live aircraft or non-standard injection methods are not supported.
2. Installation

2.1 Distribution

Lorby Tug Driver is distributed as a self-extracting installer package.

2.2 Installation

- Please use the installer intended for your sim:
  - Prepar3D V4.x: LorbyTugDriver_Install_P3D_V4.exe
  - Prepar3D V5.x: LorbyTugDriver_Install_P3D_V5.exe
Running the installer:

On the first page you may select optional installation targets:

- “Start Menu Shortcuts”: Lorby Tug Driver will be added to your Start Menu (advised)

- Selecting “Install” will begin the installation

The app is installed here:
C:\Users\...\Documents\Prepar3D v4 Add-ons\Lorby-SI LorbyTug Driver_P3D_V4
C:\Users\...\Documents\Prepar3D v5 Add-ons\Lorby-SI LorbyTug Driver_P3D_V5
3. Operations

3.1 Starting the application

– Start your simulator
– By default Lorby Tug Driver is configured to start automatically with your simulator
– The app will connect automatically to your sim.

– As soon as your vehicle has been detected and the simulation is running, you can start using the Tug Driver

– By default, the app is controlled with the row of number keys above the keyboard

The app does not work stand-alone, the simulator must be running!
3.2 General handling

Lorby TugDriver can be operated either from the main window or from inside the simulation. Both will always show the same information.

Double-Click a line to trigger the selection

Press the designated key (mouse does not work here)
3.3 Main app window buttons

- *Show sim message box*: toggles the SimConnect window in the simulator
- *Include immediate departures*: controls if TugDriver will display unscheduled traffic too
- *Switch to tug*: will load the included pushback tug as your current vehicle
- *Scan scenery*: the app reads your scenery library to build the internal database. Do this every time you install new scenery
- *Set attachment point*: when using a different vehicle, you can set the attachment point of the tow bar on your vehicle with this. After connecting the bar to the airplane, drive up to the tow bar until it is in the right location, then press this button
- *Controls*: Assign different keys or joystick buttons instead of the numerical keys.
3.4 Driving the tug

The controls for the tug are simple:

- Throttle 1 axis = accelerate
- Brakes L/R axis = brake
- Rudder axis = steering
- “R” key = puts it in reverse

3.5 Selecting an AI for pushback

The app will display a list of aircraft that will depart in the next minutes. You can select one by pressing the number key (those above the keyboard!) associated with it.
3.6 Getting to the aircraft

You can choose between jumping to the aircraft position immediately ("Warp") or to drive there yourself ("Drive").

3.7 Attaching the tow bar

When you arrive at the stand, the next action is to attach the tow bar to the front gear of the aircraft. Use the number keys 1-4 (above the keyboard) to adjust the position forward/backward/up/down, then press 5 to attach.
3.8 Attaching the tug

Next, drive the tug towards the tow bar until it attaches. This happens when you are closer than 15 cm and the angle between the tow bar and your vehicle is smaller than 15 degrees.
3.9 Pushing back

Once the tug has been connected, wait for the clearance before you start pushing back the aircraft. When ready, the status window will show the message “CLEARED TO PUSH” and the runway that the AI needs to go to. Adjust pushback direction accordingly.
Do not exceed the angular deflections of +/- 75 degrees on nose gear and tow bar.

Please be mindful that you don't have a lot of time. At some point the simulator will decide that the AI has been idle for too long and just delete it.

3.10  **Detach the tow bar and release the AI**

When the pushback is complete, release the tow bar by pressing “5”. It will be disconnected from the nose gear of the aircraft, but remains attached to the tug.

Pull away from the aircraft, the release it for taxiing by pressing “5” again.
4. Controls

1. Left-click into the cell in the “Assigned” column
2. Press the desired key or joystick button
   To assign keyboard combos, press one key after the other, not at the same time.
3. Save

Keyboard keys only:
Right-click into the cell in the “Assigned” column to switch between “normal hotkeys” and “simulator keys”. “Sim” keys work (only) from within the simulation.
5. Disclaimer

Lorby Tug Driver is provided free of charge, for private use only. All property rights remain with the author. You may not distribute this package or parts of it. Disassembling, refactoring or changes of any kind are prohibited.

Disclaimer of Warranties. The author disclaims to the fullest extent authorized by law any and all other warranties, whether express or implied, including, without limitation, any implied warranties of title, non-infringement, merchantability or fitness for a particular purpose. Without limitation of the foregoing, the author expressly does not warrant that:

- the software will meet your requirements or expectations;
- the software or the software content will be free of bugs, errors, viruses or other defects;
- any results, output, or data provided through or generated by the software will be accurate, up-to-date, complete or reliable;
- the software will be compatible with third party software;
- any errors in the software will be corrected or that any further development will take place;
- the software will not cause errors or damage to the computer system it is installed on.

(c) 2020 Lorby-SI
Project Management - Development - Consulting
lorby-si@outlook.de
http://www.lorby-si.com