Getting started with Talking Flight Monitor

Getting started guide for Talking flight monitor. A basic overview of the program, initial setup, and a broad overview to get you in the sky!

Introduction

What is Talking Flight Monitor, what can it do, history, and a broad overview of what you can expect in this guide.

History

Talking Flight Monitor (TFM) began as a modest project called Flight Following, created by blind flight sim enthusiast Jason Fayre. Initially, its sole purpose was to announce the nearest city while flying. But as the community grew, so did the ambition—users began requesting more features, including access to flight instruments, lateral runway guidance, and control over the default simulator autopilot. As the project matured, developer Andy joined, bringing valuable software and web development expertise. With this new momentum, the focus shifted to supporting the PMDG aircraft in Prepar3D (P3D), which offered a robust SDK through FSUIPC. At this point, Flight Following had evolved into Talking Flight Monitor—a name reflecting its expanded scope and capabilities. TFM soon provided varying degrees of access to flight management computers (FMCs) and aircraft panels in the PMDG 737, 747, and 777 series. As the flight sim community transitioned to Microsoft Flight Simulator 2020 (MSFS), so did TFM—presenting its work at various accessibility and simulation events along the way. Then, in early 2024, TFM entered a new chapter: a full-scale rebuild that laid the groundwork for what you're using today. To ensure long-term sustainability, TFM introduced a paid subscription model and formed a voluntary taskforce to help steer its development. Work soon began on the newly released—and initially unsupported—PMDG 777 in MSFS. After over a year of development, alpha and beta testing, and community feedback, TFM now offers blind users complete access to the 777, empowering them to fly this complex aircraft entirely independently. And this is just the beginning—there's much more to come from TFM.

An Overview of TFM's features

Who Should Read This Guide?

This guide covers Talking Flight Monitor’s User Interface, Features, Keyboard commands, and how the software interfaces with the simulator.

Supplementary Learning Resources

- Video tutorials such as those found on the Talking Flight Monitor Youtube channel and aircraft specific video tutorials
- Aircraft manuals and checklists that are included with the aircraft itself
- Content published by the BVI Pilots community

Note: This guide provides an overview of TFM. For detailed aircraft-specific operating procedures, please refer to the supplementary resources mentioned above.

What is Talking Flight Monitor?

Talking Flight Monitor (TFM) is an advanced add-on for Microsoft Flight Simulator 2020 and later versions, designed to enhance the accessibility and functionality of flight simulation for print disabled Sim Pilots using the powerful capabilities of FSUIPC.

Key Features

TFM offers many features. A brief overview of these features include:

- Instrument Reading and manipulation: Comprehensive access to key flight instruments such as speed, heading, altitude, communication radios, and nav radios.
- Advanced Aircraft Integration: Flight Management Computer (FMC) interaction for complex aircraft (Current support for PMDG 777; Upcoming support for PMDG 737 and 747)
- Navigation and Location Services: Real-time aircraft location tracking, Detailed geographical information, Airport Database:, and Comprehensive airport information such as runway lengths, and gate information.
- Easy aircraft repositioning
- Precision Instrumentation: Instrument Landing System (ILS) readings, including reading and outputting aircraft position for both glide slope and localizer.

Setup and First Time Run

Steps for getting up and running with Talking Flight Monitor for the first time

Talking Flight Monitor First Run Setup

This guide walks you through the steps needed to install and run Talking Flight Monitor (TFM) for the first time.

System requirements and Prerequisites

Prior to launching Talking Flight monitor for the first time, please insure you have the following on your system

- An installed, set up copy of Microsoft Flight Simulator 2020, (The same minimum system requirements as Microsoft Flight Simulator are also needed to run Talking Flight Monitor.)
- FSUIPC7
- Microsoft .net Framework SDK version 9 or later, the latest version can be found here
- An installed and activated copy of any PMDG 777 variant.
- Your obtained license activation info purchased from the Talking Flight Monitor Store

Initial Launch and Connection

When you open Talking Flight Monitor for the first time, you will first have to enter your activation code obtained from talkingflightmonitor.com. This information will also be sent to you in an email after your purchase. After entering the code, press the enter key and the product should be activated. Please note that activation requires an internet connection. If activation was successful, you will encounter the connection status window. If Microsoft Flight Simulator (MSFS) is running

and FSUIPC is set up correctly, TFM should automatically connect to the simulator after successful activation. Once connected, you can access the TFM menu system to begin configuration.

Key Initial Steps

The following tasks are recommended for first-time setup:

1. Build the Airport Database
2. Configure Settings to Suit Your Preferences

Building the Airport Database

It is strongly suggested that you update TFM's AIRAC data via Navigraph Hub before building the database. Completing the below steps will allow TFM to provide information while on the ILS and on the ground at an airport. A live walkthrough of this can be found here

To update Talking Flight Monitor's AIRAC database:

1. Launch Navigraph Hub.
2. At the top of the page, there is a button that says "MSFS2020, installed outside of simulator." Select this button.
3. As you down arrow, you will see a section referencing Talking Flight Monitor with an update button below. Select this button.

To build the airport database:

1. Press Alt, followed by O to open the Tools menu. The first option should be the Airport Database.
2. Press Enter to select it.
3. Use the Tab key to navigate to the Build Database button and press Enter. Note: The database build can take 10-30 minutes or longer. Performance may improve if MSFS is not running during the build process.

Configuring Settings

While the airport database is building, you can explore and configure TFM settings, such as:

- Geonames Username: If you’re using this service for the first time, create an account and input your username.

- Flight Following Interval: Set how often flight following updates are read.
- ILS Readings Interval: Configure the time between Instrument Landing System updates.
- Screen reader voice or sapi (chooe the voice TFM uses)
- Sapi speech rate
- Enabling ILS readings
- Enabling to output to a braille display if applicable for you

Completing the Setup

Once the database build is complete:

1. Return to the TFM menu.
2. Select an aircraft if you built the database with the simulator open and an aircraft loaded. If you didn’t complete the build with the simulator running and an aircraft loaded into the simulator, then load the simulator at this point, and ensure that FSUIPC interfaces with TFM correctly and it connects up to the simulator. Then, if that is correct, choose an aircraft.
3. Start exploring the various functions of your chosen aircraft, like the FMC, MCP, PFD, etc. You’re now ready to use Talking Flight Monitor with its full functionality!

An Overview of the Talking Flight Monitor User Interface

How to get around, how to manipulate TFM, and a brief overview of some of the most frequently used areas

An Overview of the TFM Interface

How to Get Around

When you first launch TFM, you will be on the connection status screen. This can be changed in settings, found in the options menu. You will manipulate and get around Talking Flight Monitor using the following methods:

- The TFM Control Key, (Right Bracket by default): Press this key prior each time you would like to retrieve or change announced information on the fly.
- The TFM Menu: To access this menu, press the Alt key.
- aircraft selection in the tfm main menu is quite important, as it enables the rest of TFM’s features. To set this, open the tfm menu bar with alt, and choose the appropriate airplane in the “choose aircraft” submenu
- Access the aircraft menu with alt followed by r. Some important items include the pfd, mcp and aircraft panels.
- The FMC can also be found in this menu, and is the heart of any PMDG aircraf
- -Some users tend to pop out windows that are frequently used. These include the MCP, either FMC, and the PFD. To pop out a window, open the window first, then press the Alt key, followed by the letters o, then p.

A brief look at manipulating TFM

This section covers an overview of the basics that you will encounter as you learn your way around Talking Flight Monitor.

The TFM Control Key

Talking Flight Monitor has a Layered keyboard command system. In the majority of cases, you will primarily interact with TFM using the TFM control key, followed by a subsequent command to read instrumentation or manipulate Talking Flight Monitor’s options on the fly. For English keyboards, the TFM control Key is set to right bracket. For instance, if a user wanted to check the aircraft’s current speed or heading, a user would press and release right bracket, followed by either the letter s or h on their keyboard. If the user then wanted to check their heading, the tfm control key would be pressed again, followed by the letter h. Talking Flight Monitor will beep to signify when you have invoked the TFM Control command. The TFM control key can be customized within keyboard manager.

Note: Please see The TFM Control Key Layer

section in the quick reference command book for all of the possible commands that can be used within the TFM key layer.

The Alt key, quick access shortcuts, and The TFM Menu Bar

To access Talking Flight Monitor’s Menu bar, while in TFM’s main window, press the Alt key. The menu bar allows you to access the various screens and windows of the application, pop out windows, and access the application’s preferences. After pressing Alt, you can press any of the quick access keys listed with any of the menu items to quickly access that specific option. Holding down Alt while pressing a specific quick access menu key will not yield the result that you may expect, as alt keyboard shortcuts have been assigned to numerous other functions that can change based on the currently focussed window. This can primarily be seen in all windows within the Aircraft menu excluding the CDU. A prime example of this behaviour is within the MCP section. As you tab around the various controls, you will notice that TFM will speak quick access keys after the currently focussed control is read. In most cases, you can either press that quick access key with or without alt. This can be very handy in cases where you are inputting data into a field and wish to invoke a quick access key without moving your focus away from the entry field.

The basics of the FMC

The FMC can be found within the TFM Aircraft menu. Once open, press tab and shift tab to explore the various buttons and fields. Each button can also be activated with it's accompanying quick key; this information can be found once focus is on a specific control. To jump to the FMC display read only box, press alt+home. Alt up and down arrows act as next and previous page, respectively. CDU messages that pop up will be shown at the bottom of the CDU display. To clear these messages, press alt+C.

To access the scratchpad, press alt+s to jump to the field. Type any information desired, and press enter to send the information to the aircraft. This buffer was created to prevent user error. You will receive an announcement once the information has completely transfered. Press the corresponding line select key to transfer the information from the scratchpad to the appropriate line. The scratchpad field in TFM will clear once the enter key is pressed.

Note: Please see the CDU Commands section

in the Quick Reference Command book for a complete list of keyboard shortcuts.

Important Note on Line Select Keys

Depending on how you have the line select mode set, press either ctrl and the numbers 1 through 6to activate the left line select keys, and Alt+1 through 6 for the right. The alternative mode uses function keys F1 through F12, with F1 through F6 as the left side, and F7 through F12 as the right side. To switch between modes, use the keyboard command Ctrl+l.

The basics of the MCP

To access the MCP, while in the main TFM window, press alt followed by R. Use first letter navigation or down arrow to find the MCP. Left or right arrow while focussed on the tab bar or ctrl and the numbers 1 through 5 will navigate you across each of the various panels. To change an MCP value such as altitude, heading, or speed, place focus on the field, input your value, and press enter. The keyboard shortcuts found over each control can aid you in manipulating the MCP further.

Note: For a complete list of available keyboard shortcuts that can be used in the MCP, please see the MCP Commands section

in the Quick Reference Command book.

The gates and Runways screens

These screens can be accessed through the navigation menu in TFM, accessed by pressing alt followed by N. An airport database build

is required for these screens to produce the expected results. The gates screen allows you to filter and reposition your aircraft to a gate or parking position. Type your airport icao in the edit box and press enter. You will be presented with a grid. Up and down arrow between the items and press enter to reposition the aircraft to the chosen position. Filters can be accessed and applied by accessing the context menu.

The runways screen works in a similar manner, however you can also access and set information for ILS readings on approach. When focused on a runway, press Ctrl+D to set this runway as your destination runway. The tab key allows you to view ILS information on the currently focused runway.

Note: The runways and gates screens are presented in a grid format. Please see the Table Sorting Commands section

in the Quick Reference Command Book for a complete list of commands for sorting and reordering grid elements

aircraft panels

TFM gives access to various panels in the PMDG 777, which can be accessed through the aircraft menu, specifically the “aircraft panels” menu item. The panels are made up of an expandable treeview, followed by controls you can tab and shift+tab through. First letter navigation can be used within the treeview. Prompts are given for most of the quick keys in pannels, and there is also a search function you can jump to with the F2 key.