



# EFB and Apps in the simulator

**\*\*A MSFS 2024 native hang gliding experience\*\***

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*Be as realistic as we possibly can.*

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## The Hang Gliding Files

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The hang gliding files is a project of the NextWave Mobile Apps company. We are building tools, aircraft, models, whatever is necessary to fly hang gliders in the MSFS 2024 flight simulator.

### ***Be as realistic as we possibly can.***

But we also must leverage and bend to the environment that we are trying to do that in. This simulator gives us a great simulated Earth with complete geography, photogrammetry, weather and physics engine. It lets us explore this world as an Avatar. That Avatar happens to be an aircraft and all our interactions with this environment is as if we were this avatar. That makes it a flying simulator (as opposed to say a fishing simulator).

But a hang glider (flex wing types especially) does not fly or operate like any other aircraft other than they move the air and use aerodynamic physics to “fly”

## What is Electronic Flight Bag (EFB)?

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The electronic flight bag is new to MSFS 2024 (for the MSFS 2020 pilots out there). It provides a common method for finding and running additional software applications within the simulator that are not gauges or other instrumentation types of interfaces. It comes with a lot of pre-built applications and those are typically suitable for pilots wishing to use the career mode within the sim. It helps you with flight planning, research, weight and balances, you know, airplane stuff.

It takes the form of tablet. It can be a stand-alone tablet or built into part an aircraft models cockpit. Nice if you have cockpit. We don't.

We just add our applications here now instead of using the toolbar as was done in MSFS 2020. All the 2020 tool bar applications still work, and still update the toolbar, but that is not the best practice in this new simulator.

We will document our applications that run on that table here.

### **EFB applications**

Applications appear on the first screen when you open the EFB tablet. They appear as icons and text like on a PC desktop.

Selecting any Icon will launch that application.

## The Widget

The Widget is our first EFB application. It is port of the Widget that was a toolbar application in MSFS 2020.

This application is used to find sites to fly and then to get you and your glider to that site so that you can fly there. That is just the basics and primary purpose.

**\*\*There are a lot of ways that you may want to find some place to fly!\*\*** You can search by a name (or any string value like a country, state or city) and if that text exists within the definition of that site, it will be in the list to choose from.

You may just want to fly from some random site that you have never heard of before.

You may want to fly from the list of your favorite sites you have flown before.

You may want to fly from a list of sites where the real weather is favorable to fly in right now.

We just try our best to provide sites, update those sites, and help you find and fly those sites.

## Future Application possibilities

There is really no limit to what other applications we come up with to aid in us providing tools to help you enhance your experience flying hang gliders in simulators.

If you have any ideas, please let us know using the links at the end of this document.

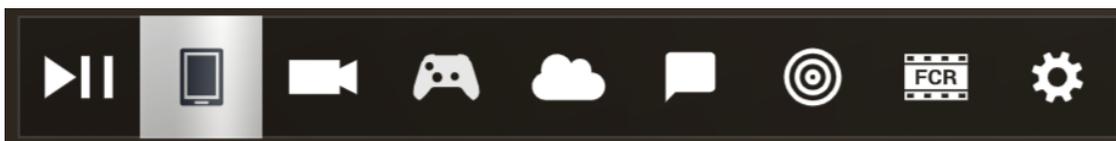
**\*\*Some examples:\*\*** Personal badges or skills or tasks completed.

Longest flight competitions or other task related leaderboards

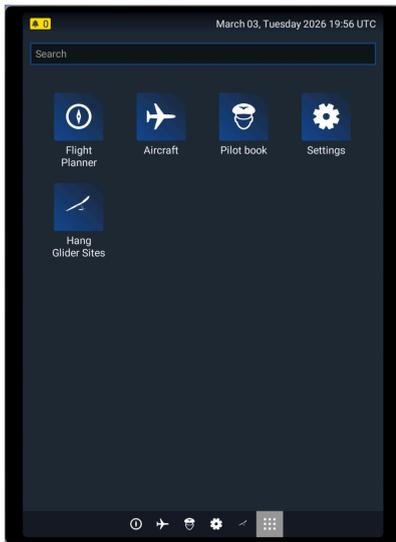
Creating tasks using the simulator as an input device.

## Using the EFB

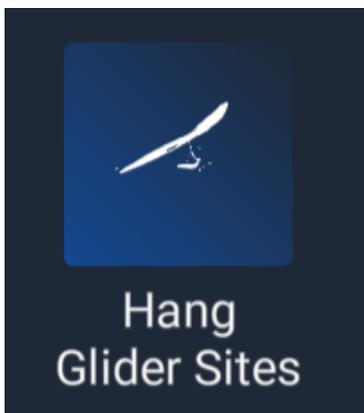
You start the EFB by choosing it from the main toolbar.



This will load the EFB Table and on that main page of the table are all your installed EFB applications. You can use any of these with your hang glider, but I don't know what use they would be.



Main EFG table page



We are only going to talk about the Hang Glider Sites (the widget)

Clicking this icon will launch the Widget application at any time while you are in the simulator.

## What is a hang glider site?

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### Setup Areas

### Launch Areas

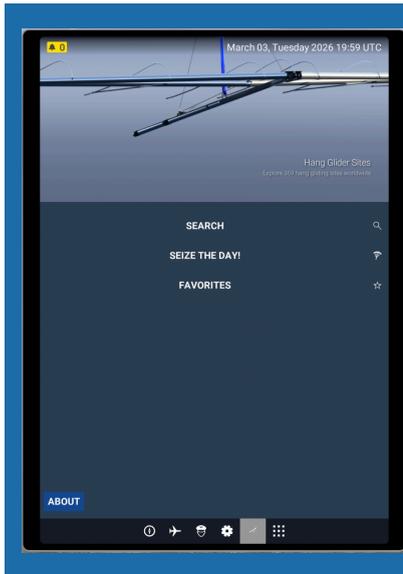
### Landing Areas

### Custom sites/airports

## Finding Sites

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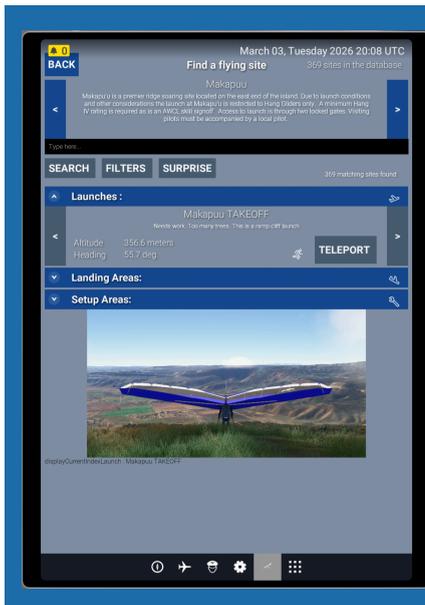
This is the main page for the Widget. It defines 3 different databases that you can search from:



- The entire database (search)
- The current list of curated sites that should be flyable in real time/real weather.
- The current list of your past favorite sites.

## Search

The search section will allow to find any site that exists within the database. We provide multiple ways to search and then look the list of site(s) that may match your search.



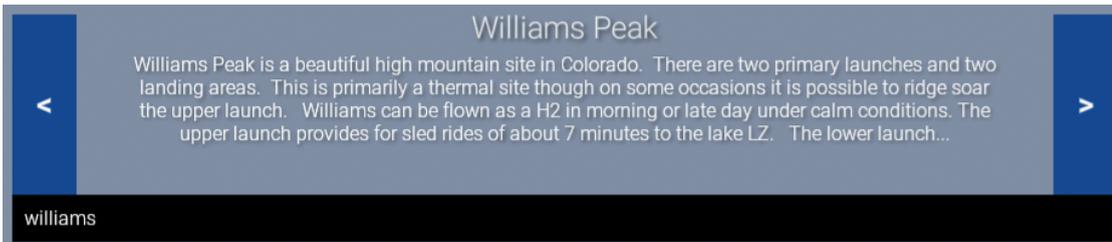
This screen shows the current site (defaults to the first in the list). You can scroll left or right using the arrow buttons.

You can filter the scrollable list by:

- Entering a search string and the Search button
- Filters button
- Surprise me button

## Search string and the Search Button

You can enter as much text as you like in the search string. It will filter the list as you type in characters. Stop typing if you think your site has been found, but the application will show in the list all sites that have any string that matches what you have typed.



Currently selected site and the search text



Search button will re-execute the search criteria

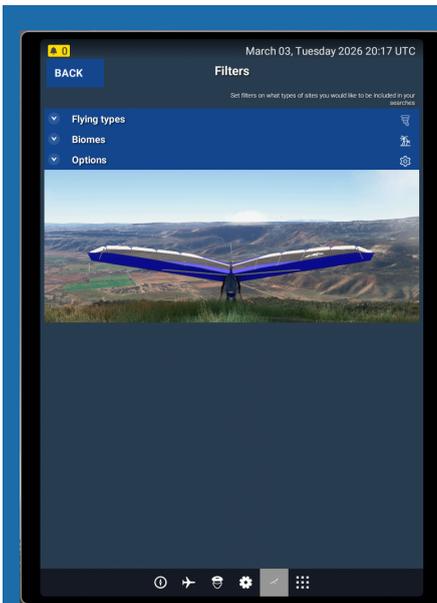
This also populates the list(s) of launches, landing areas, and setup areas associated with the currently selected site

## Filters

Filters is another way to shorten the list of possible sites with or without using a search string.



Filter button will bring up filters page.

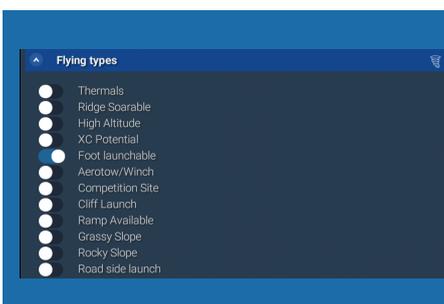


This screen allows you to choose specific criteria about a site that will get you what **Kind of flying** you may want to do:

You can filter the scrollable list by:

- Flying types
- Biomes
- Options

## Flying types



Flying types are attributes a site may be defined with. You can one or all options at the same time.

Change these will filter the scrollable list

## Biomes

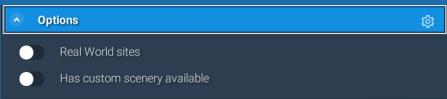


- Flat Land
- Beach
- Dunes
- Mountain/Alpine
- Mountains above tree line
- Desert
- High Desert
- Ski Areas
- Arctic
- Rain Forest
- Jungle

Biomes describe the type of terrain or geography you may be interested in.

Change these will filter the scrollable list

## Options



- Real World sites
- Has custom scenery available

Option lets you filter to show only actual real world sites or all the possible sites. You can also filter to just sites that have a custom site package available (somewhere).

Change these will filter the scrollable list

## Surprise



Suprise button will randomly choose

You do not know where you want to fly today? You want to fly somewhere new? Surprise yourself with the surprise button. This is fun.

## Getting to the site

Once you have selected the site you want to fly, however you find and choose the site, you need to then put yourself and the glider at that site to fly there. You can just use the first launch in the list and try that but let us discuss some options.

**First and foremost:** We like to always fly in real weather. You always get to choose a time within the last 24 hours to fiddle with. This may not be useable at your chosen site! Very much like the real world, you may have to chase the wind on any day. But what if the weather is good to fly, but the wind is not good for launching on your selected site? This is where you can go to different launches and see what launch on a site is best. Some sites have 1 launch, others have dozens. Setup areas are simply the safest (flattest) place on or near launches to spawn into. Think about a cliff launch. Do you want to spawn right on the edge? NO! Go to the setup area and check it out first. The same goes for landing areas at a new site. Sometimes they are hard to find from the air or are not where you may think they are. You can spawn on a landing area and check that out too. You can jump from place to place using the widget as much as you like at any time.

**That's what it's for!**

## Launches

A launch can be anything from a runway, a cliff, a roadside or a gentle slope. Whatever it is, it is identified as a good place to try and start aviating from.



This section will show you all the defined launches on the current site. This includes its name, description, altitude, and desired heading. You can scroll between launch(s) using the left and right arrow buttons.



the launch type teleport button

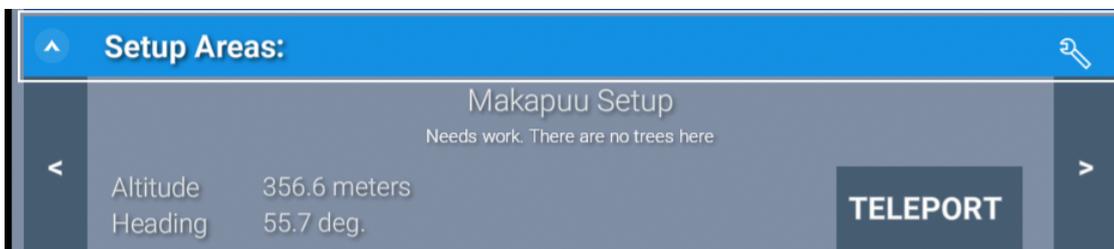
The teleport button will put you and your glider on this launch. The icon depicts if this launch is a foot launch or a tow launch. For tow launches, you will not be spawned connected to a winch. You will need to request a tow. (see ground handling documentation or the towing documentation).

## Landing areas



Landing areas are any identified area that is flat and open enough to land in. You may want to visit them on new sites just to see what you are in for when approaching the LZ for the first time.

## Setup areas



Setup areas can be on or near to launches. They are simply safe places to be and close enough to launch(s) to just walk the glider over to them. For airplane pilots this is like a parking area, and you then taxi your airplane to the runway.

## Moving to launch once you arrive

Your glider has no motor! But you can still move on the ground. It's not hard to learn and you do need to learn how it is done to foot launch from a hillside. See the ground handling documentation to learn more about it.

## Carpe Diem

Seize the Day!

This function will have automatically filtered all possible sites down to only those sites that have current, real-world weather reports that indicate possible good soaring weather forecast.

Uses the standard screen for results.

*(see THGF Desktop app to see how this works)*

## Favorites

This function will have automatically filtered all possible sites down to only those sites that you have flown in the past and have given a good rating or review.

Uses the standard screen for results.

*(see THGF Desktop app to see how this works)*

## Future Enhancements

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We have plans to enhance this application over time. Some known future enhancements:

- Web database access
  - Find site information from our online database.
  - Record flights records by sites
  - Show online pilots and positions in real-time.
- Transfer chosen site information to the internal Variometer

## Future Applications

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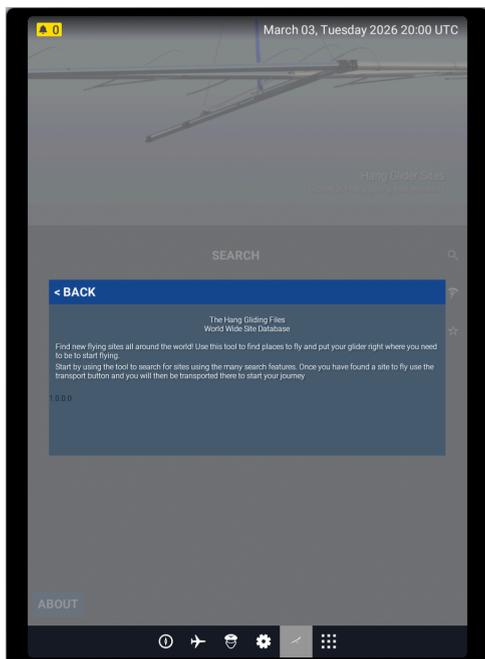
We are thinking about building other EFB based hang gliding applications.

- Competition Tool
- Task Builder
- Mission Builder
- Site Builder
- Log Book
- IGC Viewer (in sim)
- Group flight tool
- Others?

# About

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A good place to see what version of the application is running if you are reporting any issues.



# Future

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**The future? The future isn't here yet!** Well, it is. We can't wait to see what is next.

# How to help

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Join our Patreon and help us continue this journey.

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