THGF Desktop App — User Guide

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1. Introduction

The THGF Desktop App is the central management tool for hang gliding sites in Microsoft Flight Simulator 2020. It is a Windows application that gives you a complete database of flying sites from around the world, each mapped with launch points, setup areas, and landing zones.

The app serves as the hub connecting several pieces of the THGF ecosystem:

- It maintains a database of all your flying sites in a local file called `site_data.json`.
- It syncs that database to the THGF Widget add-on inside MSFS 2020, enabling direct teleportation to any site position.
- It lets you create your own sites, define custom flight tasks, and share them with other pilots.
- It tracks your flights in a built-in log book.
- It integrates with XCSoar for cross-country task planning.

The app ships pre-loaded with hundreds of real-world hang gliding sites. You can browse them, fly them, and contribute new ones.

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2. System Requirements & Installation

Requirements:

Item	Minimum
Operating System	Windows 10 or Windows 11 (64-bit)
Microsoft Flight Simulator	MSFS 2020
THGF Widget	Installed in MSFS 2020 Community folder
.NET Framework	4.8 (included with Windows 10 and later)

Installation:

1. Download the THGF installer (`THGF_Setup.exe`) from thehanggli dingfiles.com
2. Run the installer and follow the prompts

3. On first launch, open **Settings** and set the path to your MSFS 2020 Community folder

The installer places the application in `D:\THGF` by default. The Widget add-on must be installed separately into your MSFS 2020 Community folder.

Checking for Updates:

Each time the app starts, it checks the THGF website for a newer version. If a newer version is available, a notification will appear. Download and run the new installer to update.

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3. Interface Overview

The app uses a collapsible side navigation drawer on the left, with the main content area on the right. The drawer can be expanded to show labels or collapsed to show icons only.

Navigation Items

The drawer contains the following sections, listed top to bottom:

Icon	Section	Purpose
Search	Advanced Search	Multi-criteria site search
Pin	Where to Fly	Main site browser — your default view
Tiles	Site Gallery	Tile-card view of all sites
Import	Import	Import data from files
Share	Share & Export	Send data to Widget, files, or THGF
Tasks	Flight Tasks	Manage XCSoar flight tasks
Book	Log Book	Your flight history
Sun	Carpe Diem	Real-weather site finder
POI	Points of Interest	Manage custom POI markers

Three icons at the bottom of the drawer open settings panels:

- **Connect** — MSFS 2020 connection settings
- **Tools** — application tools
- **Settings** — folder path configuration

Status Bar

The dark status bar at the bottom of the window contains:

- **MSFS 2020 icon** — indicates simulator connectivity
- **Quick Find** — a fast autocomplete search box (see Section 4)
- **Site count** — total number of sites currently in your database
- **Add New Site** button — opens the site creation dialog

The status bar is always visible regardless of which section is active.

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4. Quick Find

The **Quick Find** box in the status bar is the fastest way to navigate to a specific site. It is available from every section of the app.

Type at least two characters and a suggestion list will appear. Results are matched against site names and locations. Select a result to navigate directly to that site's detail view.

Quick Find vs. Advanced Search:

Quick Find is optimised for speed when you already know which site you want. If you want to discover sites by flying type, biome, or other characteristics, use the **Advanced Search** view (Section 5) instead.

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5. Advanced Site Search

The **Search** view allows you to filter the site database by multiple criteria simultaneously. A results list on the right updates as you check or uncheck filters.

Flying Types

Filter sites by the kind of flying they offer:

- Thermals
- Ridge Soarable
- High Altitude flying (oxygen required)
- Has XC potential
- Cliff Launch
- Aerotow / Winch
- Has a Ramp
- Grassy Slope
- Rocky Slope
- Roadside Launch

Biomes

Filter by terrain environment:

- Flat land
- Beach / Dune
- Mountain / Alpine
- Mountain above tree line
- Desert / High Desert
- Ski Area
- Arctic
- Rain Forest / Jungle

Options

- **Real world site** — site based on an actual flying location
- **Imaginary site** — fictional or training site
- **Has scenery available** — a THGF scenery package exists for this site

Results List

Each result in the list shows the site name, description, country, state, elevation, takeoff count, and flags for Foot Launch, Aerotow, Thermal, and Ridge flying. Clicking a result navigates to that site.

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6. The Site Gallery

The **Site Gallery** view presents all sites as interactive tiles arranged in a two-column grid. Each tile shows a summary card for the site.

Tiles can be minimised (showing just the header) or maximised (expanding to fill the view with full detail). Click a tile header to toggle between normal and maximised state.

This view is useful when you want to browse visually through the database rather than searching by name.

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7. Creating and Editing a Site

Press the **Add New Site** button in the status bar to open the site editor. The same dialog is used for creating new sites and editing existing ones.

The editor is organised into tabs.

Site Tab

Core identification fields:

Field	Description
Site Name	The display name — shown in the Widget search and site lists
Description	Free text describing the site, terrain, and conditions
Country	Select from the country list
State / Region	Text field for state, province, or region
ICAO	Nearest airport code — used to pull real weather data for this site
Min. Rating	Minimum USHPA hang rating recommended for this site (1–5)

Launches Tab

Defines one or more takeoff positions. Each launch record stores:

- **Name** — e.g. “Main Launch”, “South Bowl”
- **Latitude / Longitude** — decimal degrees
- **Elevation** — metres above sea level
- **Heading** — the launch direction in degrees

You can add multiple launches to capture different takeoff directions at the same site.

Setup Areas Tab

Defines one or more glider setup (spawn) positions. A setup area is where your glider first appears in MSFS when you teleport to a launch. It is typically a flat parking or staging area near the launch face, not the launch itself.

Setup areas use the same coordinate and elevation fields as launches.

LZ Tab

Defines one or more landing zones. Each LZ record stores coordinates, elevation, and a name. Multiple LZs allow you to document the preferred field, the alternative field, and any known bad options to avoid.

Biome Tab

Describes the terrain and environment at the site. These flags feed the Advanced Search filters. Mark all that apply — a site can have multiple biomes if it spans different terrain types.

Soaring Tab

Describes the soaring characteristics at the site. Mark all flying types that apply. This data also feeds the Advanced Search filters and helps other pilots understand what kind of flying to expect.

Tasks Tab

Links existing flight tasks to this site. Tasks linked here will appear under “Just tasks known for this site” in the Flight Tasks view. See Section 10 for more on tasks.

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8. MSFS 2020 Widget Integration

The THGF Widget is a toolbar add-on inside MSFS 2020. It reads the `site_data.json` file maintained by this app and lets you teleport your glider to any defined site position during a flight.

How the Sync Works

Every time you save a site in the app, the database file is updated automatically. However, **MSFS 2020 reads this file only on startup**. If you create or edit a site while MSFS is already running, the Widget will not show your changes until you restart MSFS.

If the Widget and app databases get out of sync (after a reinstall, for example), use the **Force Widget Update** option on the Share page to overwrite the Widget database with your current app data.

What the Widget Shows

When you select a site in the Widget, it shows three categories of teleport buttons:

- **Launch** — all launch positions for the site
- **Setup** — all setup area positions
- **LZ** — all landing zone positions

Press a button to teleport your glider to that position. The glider will be placed on the ground at the exact coordinates and elevation you defined, facing the heading you recorded.

Site Names and Searchability

The Widget’s search matches on site name. Use clear, specific names — “Point of the Mountain South Face” is easier to find than “Utah Site 3”. If your sites are not appearing in the Widget, confirm that MSFS has been restarted since the last database update.

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9. The Where to Fly View

The **Where to Fly** view is the default landing page of the app. It presents the main site list as a browsable, selectable list. Selecting a site here loads its detail and prepares it as the active site for the Share and Edit actions.

This is also the view that responds to a Quick Find selection — navigating to a site via Quick Find will update the selection in this view.

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10. Flight Tasks

The **Flight Tasks** view manages XCSoar-format flight tasks — defined cross-country courses with turnpoints, start gates, and finish lines. Tasks are separate from sites but can be associated with one or more sites.

Browsing Tasks

Tasks are shown in a list with name, description, task type, estimated flight time, total distance, and turnpoint count. The task list can be filtered by:

- **All known tasks** — the full task database
- **Just tasks for this site** — only tasks explicitly linked to the active site
- **Tasks that start within X km of this site** — a proximity filter

Set your estimated average glider speed (in km/h) in the top-right corner. The app uses this to calculate estimated task times for all tasks in the list.

Creating a Task

Press **Create a New Task** to open the task editor. Tasks are created in XCSoar format (`.tsk`) and stored in your local task database.

Importing Tasks

The **Import** tab on the Tasks view supports three sources:

Format	Button	Description
XCSoar Task	Import a TSK file	Standard XCSoar `.tsk` format
MSFS Flight Plan	Import a PLN file	MSFS `.pln` format, converted to a task
THGF Task JSON	Import a JSON file	Task JSON created via the Share page

Recommended tools for building tasks:

- B21 Task Planner — online flight planner that exports TSK and PLN files

- XCSoar — free flight computer application, runs on Windows, can connect to MSFS

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11. Share & Export

The **Share** view controls how your data is distributed — to the MSFS Widget, to files on disk, or to the THGF community.

The top of the view shows which site is currently active. Two radio buttons switch between **single site** and **all sites** mode.

Single Site Options

Button	Action
THGF	Submit this site to The Hang Gliding Files for community review
FILE	Save this site as a JSON file
TASKS	Export all tasks associated with this site as a JSON file

All Sites Options

Button	Action
WIDGET	Force-write your entire database to the MSFS Widget — use when databases are out of sync
FILE	Save your entire database as a JSON backup file
TASKS	Export all tasks as a JSON backup file

Submitting a Site to THGF

Pressing the **THGF** button sends your site data to The Hang Gliding Files team for review. If accepted, the site will be added to the community database and appear in future versions of the app. The submission includes all launch, setup, LZ, biome, and soaring data you have recorded.

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12. Import

The **Import** view is for bringing external site data into your local database. Use this to restore a backup, add sites shared by another pilot, or merge a site package downloaded from the THGF website.

Supported import formats:

- THGF site JSON (single site, exported from Share)
- THGF database JSON (full backup, exported from Share All)

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13. Log Book

The **Log Book** view records every simulated flight you complete at a THGF site.

Stats Summary

Three counters at the top show your cumulative totals:

- **Sites Flown** — number of distinct sites you have flown at
- **Hours Flown** — total time in the air
- **Total Distance** — total distance covered across all flights

Flight Grid

Below the counters, a sortable data grid shows individual flight records. Columns include site name, date, duration, and distance. Click any column header to sort.

Managing Records

- **Delete** removes the selected flight record from the log
- **Favorite Sites** opens a view of the sites you have flown most often

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14. Carpe Diem — Real-Weather Site Finder

The **Carpe Diem** view answers the question: *given the current real-world weather right now, which sites in my database are actually flyable?*

The view pulls live weather data from ICAO weather stations associated with each site, evaluates conditions against the site's soaring characteristics, and produces a filtered list of sites that match.

Filters

- **Region** — limit results to a geographic region
- **Country** — limit results to a specific country
- **Time** — local and UTC clocks are shown to help you think about soaring windows

Using the Results

Once Carpe Diem generates a match list, you can send it directly to the Widget. This replaces the Widget's full database with only today's flyable sites — a useful way to keep the Widget focused while you are actively planning a session.

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15. Points of Interest (POI)

The **POI** view manages custom geographic markers that do not fit the site model — airspace boundaries, mountain peaks, local waypoints, or any other reference point useful for navigation planning.

POIs are stored in your local database alongside sites and are exported as part of the full JSON backup.

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16. Settings

The **Settings** view (gear icon at the bottom of the drawer) configures the folder paths that connect the app to MSFS 2020 and your other tools.

Required Paths

Setting	Purpose
MSFS 2020 Community Folder	Where MSFS add-ons are installed. The app writes `site_data.json` here for the Widget to read.
MSFS 2020 Package Folder	The data sandbox for the Widget — where tasks and vario settings files live.

Optional Paths

Setting	Purpose
MSFS 2020 Package Sample Folder	Template directory used when creating new scenery packages.
MSFS 2020 Package Output Folder	Where new scenery packages are created.
XCSoar Data Folder	If you run XCSoar on your desktop, point this to its data directory so the app can write tasks directly to it.

Widget Write Mode

Two options control how the app writes data to the Widget:

- **Merge** — adds your data to whatever is already in the Widget database, preserving any Widget-side data
- **Overwrite** — replaces the Widget database completely with your app data

Overwrite is the safer choice if you are unsure whether the databases are in sync.

Appendix — Navigation Drawer Reference

Drawer Item	View	Primary Use
Search	Advanced Search	Discover sites by type, biome, and options
Where	Where to Fly	Browse and select sites
Details	Site Gallery	Visual tile browser
Import	Import	Import site data from files
Share	Share & Export	Widget sync, file export, THGF submission
Tasks	Flight Tasks	Manage and import XCSoar tasks
LogBook	Log Book	Review flight history
CarpeDiem	Carpe Diem	Real-weather flyability filter
POI	Points of Interest	Manage reference waypoints
Connect	Connection Settings	MSFS connection configuration
Tool	Tool Settings	Application tools
Settings	Settings	Folder path configuration

The Hang Gliding Files — thehangglidingfiles.com

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