

For Microsoft Flight Simulator

Just Flight



# "Virtual Aircraft. Real Engineering." Real Taxiways 2024 User Guide

Please note that Microsoft Flight Simulator 2024 must be correctly installed on your PC prior to the installation and use of this taxiway sign data and appearance addon.

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# Introduction

Microsoft Flight Simulator has ushered in a new era of airport scenery. Airports now resemble their real-world counterparts enough to be easily recognisable, but inaccurate taxiway names, unrealistic signs and objects placed in the middle of taxiways immediately destroy immersion. Black Square's Real Taxiways has been designed by real-world aviation professionals to fix these problems, resulting in unique airport signage that is functionally identical to its real-world counterparts.

If you've ever struggled while navigating the taxiways of an airport in MSFS because online ATC instructions or taxiway diagrams didn't match the signs around your aircraft, this is the product for you. With Real Taxiways you will be able to navigate airports using real-world taxiway diagrams and online ATC while you learn the nuances of airport surface navigation.

In previous versions of Flight Simulator, only expensive payware scenery could provide you with the quality of airport signage achievable with Real Taxiways. Crowd-sourced alternatives, like scenery gateway systems and freeware downloads lack consistency and coverage, even when professionally moderated, which frequently disappoints real-world pilots. Real Taxiways is a cost effective solution whereby you can have thousands of consistently enhanced airports with features which have never been seen before for the cost of a single payware airport.

Real Taxiways is extremely frame rate friendly - you won't experience any performance loss!

You can exclude any airport (or airports) from your Real Taxiways installation if you wish, avoiding conflicts with freeware, payware and World Update airports.

#### **Feature Overview**

The features of Real Taxiways fall into two major categories; corrections, and enhancements.

#### What's New In MSFS 2024?

- Custom taxiway sign model and textures, including improved nighttime emissives.
- LOD optimization makes signs readable much farther away with no popping.
- No longer requires separate texture installations. "Just works".
- 9,096 signs updated at 66 airports for MSFS 2024.
- Numerous small fixes to airport signs.
- Now available on Marketplace and XBOX.

#### Custom Sign Models and Textures

New fully custom taxiway sign models provide greater detail than the default models, with more realistic textures. The models are LOD optimized, and readable from much further away with no noticeable "popping" from great distances. The new sign textures include custom nighttime emissive lighting, making them more readable at night, with unlit segments being truly dark. These models and signs no longer require any separate installations, and "just work" with the one-time installation.

#### Other Features

- 1,000+ airports updated with 100,000+ taxiway signs!
- Real-world taxiway names
- Near real-world taxiway sign placement
- Multiple variations of all sign types
- Double-sided taxiway signs
- Sign sizes are appropriate to the airport
- Hundreds of airport sign 'personalities' for an authentic experience
- No signs obstructing taxiways or runways
- Signs easily readable from cockpit without zooming
- Destination signs match real-world charts
- Closed taxiways updated and signs added
- Sign text padding corrected and more readable

#### Corrections

Users familiar with the default airports in Microsoft Flight Simulator will have no doubt encountered frustrations, such as oversized taxiway signs placed on the centerline of taxiways, or hundreds of taxiway lights scattered in the grass, or in parking areas of airports. Real Taxiways has eliminated the possibility of many such immersion breaking occurrences, some which even payware airports struggle with. For a complete list of these corrections, see the "Detailed Features" section of this user guide.

#### **Enhancements**

In addition to correcting many unwanted aspects of the default airports in Microsoft Flight Simulator, Real Taxiways has added more than a dozen features that have either been lost over the years since their original appearances in the flight simulator series, or have never been seen in a flight simulator before. These include the addition of dynamically generated ground vehicle signs, runway safety awareness signs, runway distance remaining signs, and custom destination signs. As many variations of these signs, in content, size, and orientation, are generated at airports with different airport "personalities" to create realistic diversity. These, and many more, are enumerated in the "Detailed Features" section of this user guide.

#### For Pilots & Aspiring Pilots

Real Taxiways was born out of the desire for accurate taxiway naming and sign placement lacking in many flight simulators, past and present. As visual fidelity in flight simulators has increased, enthusiasts and pilots have been able to use simulators to practice airport operations, including ground navigation via real world charts. However, missing taxiway sign types, poorly placed signs, and downright misleading ones, stimie this effort. Real Taxiways aims to provide the best airport operations training environment for real world pilots looking to maintain proficiency, and aspiring pilots learning the challenges of ground operations for the first time by simulating accurate placement of taxiway signs of all types and sizes that would reasonably be found at airports around the world. Users should find that airports covered by Real Taxiways regions are now navigable via real world airport diagrams, the signs on the ground, most external moving-map programs, and ATC instructions.

#### Limitations

Real Taxiways is a patching system for the default airports of Microsoft Flight Simulator and therefore must work within the current limitations of the simulator's facility data and rendering engine. While Real Taxiways does its best to eliminate unwanted results, such as noted in the Corrections section above, it is always possible that unwanted results will still be present due to unforeseen conflicts with other custom scenery, terrain data or, in the rare case, a mistake on the part of the Real Taxiways patching process. Please keep this in mind while enjoying the airports covered by Real Taxiways.

Additionally, you are encouraged to report errors in Real Taxiways' core features that you believe can be readily fixed, such as poorly placed signs or incorrect sign content, on the Real Taxiways section of the Just Flight Forum.

Real Taxiways' largest single limitation is the elimination of rogue taxiway lighting at airports that also have green taxiway centreline lighting. Due to limitations in the Microsoft Flight Simulator SDK, it is not possible to BOTH eliminate rogue taxiway lighting entirely and to allow for the presence of green centreline lighting at larger airports. The developers of Real Taxiways have taken a 'some improvement is better than none' approach to this problem by removing the majority of rogue taxiway lighting on active taxiways on all airport surface areas that do not have green taxiway centreline lighting by default in Microsoft Flight Simulator.

Lastly, Real Taxiways does not currently remove windsocks, airport beacons or autogen buildings on taxiway surfaces, though this feature is in development and may be included in future versions of Real Taxiways.

For more information on this product's capabilities and the most up-to-date list of included features, see the store page at <a href="https://www.JustFlight.com">www.JustFlight.com</a>.

# Installation, Updates & Support

#### Installation

You can install this Real Taxiways software as often as you like on the same computer system:

- 1. Click on the 'Account' tab on the Just Flight website.
- 2. Log in to your account.
- 3. Select the 'Your Orders' button.
- 4. A list of your purchases will appear and you can then download the software you require.

### Using the Automated Installer

Upon downloading and double-clicking the installer provided by Just Flight for Real Taxiways, the installer should be able to detect the correct directories for your Microsoft Flight Simulator installation and proceed with the install process. Clicking 'Next' and following the installer's instructions should result in a complete installation of Real Taxiways to your Community content directory.

## **Installing Packages Manually**

If you are reinstalling Real Taxiways, wish to exclude airports, or otherwise wish to perform the installation manually, the process should be as easy as moving or renaming files within your Microsoft Flight Simulator Community content directory. For information on locating your Community content directory, see below.

#### **Community Content Directory**

This should be named "Community", though you may have set this location manually when installing MSFS". This is the directory where you may have installed other 3rd party addons for the simulator. The exact path varies based on the installation type, such as whether you purchased the simulator from the Windows Store, or from a 3rd party vendor, such as Steam.

#### For the Windows Store install:

C:\Users\[YourUserName]\AppData\Local\Packages\Microsoft.FlightSimulator\_8wekyb3d8bbwe\LocalCache\Packages\

#### For the Steam install:

C:\Users\[YourUserName]\AppData\Local\Packages\Microsoft.FlightDashboard\_8wekyb3d8 bbwe\LocalCache\Packages\

Important: Windows 10 by default hides the "AppData" folder, so you will have to go to "View" in the menu of File Explorer, and select "Hidden items" so as to see it.

#### For the Custom install:

If you used a custom location for your Flight Simulator installation, then proceed there.

For example, you may have set:

E:\Steam\steamapps\common\MicrosoftFlightSimulator\Community

#### Uninstalling

To uninstall this product from your system, use one of the Windows App management features:

#### **Control Panel -> Programs and Features**

or

#### **Settings -> Apps -> Apps & features**

Select the product you want to uninstall, choose the 'Uninstall' option and follow the on-screen instructions.

Uninstalling or deleting this product in any other way may cause problems when using this product in the future or with your Windows set-up.

#### **Updates and Technical Support**

For technical support (in English) please visit the Support pages on the Just Flight website. As a Just Flight customer, you can get free technical support for any Just Flight or Just Trains product.

If an update becomes available for this software, we will post details on the Support page and we will also send a notification email about the update to all buyers who are currently subscribed to Just Flight emails.

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# **Excluding Airports**

Microsoft Flight Simulator employs a hierarchical scenery system that allows some scenery to overwrite, or be transparent to, other geographically related sceneries.

### With In-Game Marketplace or XBOX Installations

With in-game marketplace or XBOX installations of Real Taxiways, the only option available to control which airports are enhanced or ignored by Real Taxiways is the Package Reorder Tool, which is described below.

## With Direct or 3rd Party Store Installations (you ran an installer)

On PC/Desktop installations of Real Taxiways bought from an online store, you also have the option of excluding specific airports, **in addition to using the Package Reorder Tool.** 

The easiest way to exclude an airport from your Real Taxiways installation is to remove or rename that airport's specific BGL file from the appropriate 'bksq-' package for your installation, such as 'bksq-us-bcde', in your Community folder. Within the package you will find the BGL files in the 'scenery'global'scenery' subdirectories.

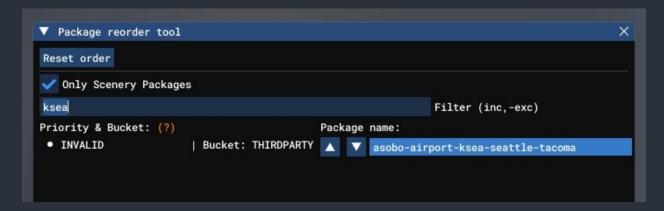
To avoid misplacing or losing specific airport files, it is recommended that you simply rename the airport file you wish to be excluded by adding the extension, '.bak' to the BGL. Doing so will prevent Flight Simulator from loading the file and making modifications to the airport. If you do lose the original airport's BGL file, a new one can be obtained by reinstalling Real Taxiways from your Just Flight account.

# The Package Reorder Tool

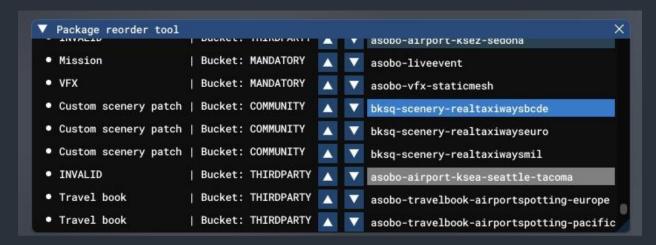
The Package Reorder Tool is an experimental feature now available in MSFS 2024. This tool can be used to customize the priority of custom scenery packages. The Package Reorder Tool can be enabled by clicking the gear icon in the upper-right hand corner of the main menu screen in MSFS 2024. From the general settings tab, click the advanced options subsection. Under the experimental heading, enable the Package Reorder Tool.



Within the dialog that opens, higher priority packages are positioned at the bottom of the list. By default, Real Taxiways will place itself in a high priority position, as it is designed to augment all default airports, bespoke airports, and World Update airports. If you wish for a 3rd party airport that you have installed in your community folder or purchased on the in-game marketplace to override Real Taxiways, first locate this package by typing the airport identifier or another keyword into the search box at the top of the window.



Then, use the arrow buttons to position the 3rd party airport BELOW the Real Taxiways packages. You may have to click the arrow button multiple times for the package to appear in a different position in the list due to hidden packages. If you make a mistake, or otherwise want to reset the package order, use the Reset Order button at the top of the window.



It may be necessary to restart the simulator to see the effect of your changes, depending on what world data is currently loaded from your last flight.

# Frequently Asked Questions (FAQ)

#### How accurate is the placement and content of each sign?

There is no international database of taxiway sign content and placement; therefore, Real Taxiways generates signs and places them based on ICAO and FAA guidelines, after a streamlined manual process is used to assign taxiway names and special properties based on charts and satellite imagery. While the results may not be perfect, the added signs are functionally identical to their real world counterparts.

#### How well will using Real Taxiways prepare me for my actual flying?

Real Taxiways was created specifically to provide a realistic training environment for pilots and aspiring pilots. There is so much left to be desired by the default airports in Microsoft Flight Simulator, much of which has a substantial impact on the quality of real world training possible, such as the omission of safety critical signage, incorrect taxiway names, and downright misleading sign placement or content. With Real Taxiways, you will be able to navigate airports using real world charts, receive instruction from simulated, and online ATC, and navigate on airport ground surfaces in a functionally identical manner to how you would in the real world, and develop essential situational awareness at your local airfields.

# Will Real Taxiways interfere with Microsoft Flight Simulator's World Updates?

Real Taxiways does not intend to cover "bespoke" airports provided in World Updates; however, the scope of these updates may expand over time. If you are aware of an airport which has received special treatment in a World Update, and you no longer wish to use the Real Taxiways version of that airport, you may always exclude that airport. For instruction on how to do this, see the "Excluding Airports" and "The Package Reorder Tool" sections, above.

### Will Real Taxiways interfere with 3rd party freeware/payware airports?

If you download or purchase a 3rd party airport, and you no longer wish to use the Real Taxiways version of that airport, you may always exclude that airport. For instruction on how to do this, see the "Excluding Airports" and "The Package Reorder Tool" sections, above.

### Can Real Taxiways be used to enhance 3rd party airports?

By default Real Taxiways will attempt to enhance all airports, including installed 3rd party ones. While Real Taxiways does not officially support any specific 3rd party airports, it might be possible to combine Real Taxiways with these airports, especially freeware ones that typically use the default MSFS taxiway sign system. If this results in undesirable outcomes, you may always exclude that airport from Real Taxiways. For instruction on how to do this, see the "Excluding Airports" and "The Package Reorder Tool" sections, above.

#### Will Real Taxiways signs models/textures interfere with other addons?

There are several other addons that attempt to improve the appearance only of taxiways signs. Real Taxiways is not compatible with these addons, because it requires is own custom taxiway sign textures to create all the enhanced features listed in this manual.

#### Do external programs, like moving maps, also benefit from Real Taxiways?

This depends on the exact implementation of the scenery database in whichever software you are trying to use. Some such programs generate their scenery database with the inclusion of 3rd party scenery in your community folder, while others do not. Only ones that take scenery in the community folder into account will see correct taxiway naming and lighting. Applications intended for use with real world aircraft should align well with Real Taxiways airports.

# **Troubleshooting**

#### I don't see any changes to airports after installing Real Taxiways.

Make sure that you completed the installation process as outlined in this User Guide. To double-check this, look in your Community content folder and see if you have the correct 'bksq-' package for your installation, such as 'bksq-us-bcde'. If you do, and its 'scenery/global/scenery' folder is populated with BGL files, then the problem lies within the simulator, possibly due to a recent update. If this is the case, contact Just Flight Technical Support. Advanced users might be able to further diagnose the problem by using Developer Mode to inspect the virtual file system and confirm whether the BGL files are being loaded from the Community folder.

### Everything installed correctly but some airports don't seem to be enhanced.

It is unlikely that only some airports have been enhanced by Real Taxiways, but not all the airports which should be covered. Double-check the list of included airports on the following pages to ensure that you are at one of the airports covered. Since it is possible to exclude some airports, as explained in the Excluding airports section, make sure that you retain back-ups of any files you remove from the Real Taxiways package in your Community folder, and simply replace them if you want to restore Real Taxiways functionality at those airports.

I still see incorrect taxiway signs, signs facing the wrong way or signs placed in the middle of taxiways, runways or aprons, and I am definitely at one of the covered airports.

Time to report an issue! Please contact Just Flight Technical Support to report the bug and it will be fixed in a subsequent update to your Real Taxiways edition. Remember, Real Taxiways aims to provide a functionally identical airport environment to the real world but may not match it exactly. Please only report errors that you believe have an impact on immersion or the functionality of an airport's surface navigation aids.

# **Included Airports**

# Class Bravo Airports

KATL	KBOS	KBWI	KCLE	KCLT	KCVG	KDAL
KDCA	KDEN	KDFW	KDTW	KEWR	KHOU	KIAD
KIAH	KJFK	KLAS	KLAX	KLGA	KMCI	KMCO
KMEM	KMIA	KMSP	KMSY	KORD	KPHL	KPHX
KPIT	KSAN	KSEA	KSFO	KSLC	KSTL	KTPA
PHNI						

# Class Charlie & Delta airports

KABE	KABI	KABQ	KABY	KACK	KACT	KACY
KADM	KADS	KAEG	KAEX	KAFW	KAGC	KAGS
KAHN	KAID	KALB	KALN	KALO	KALW	KAMA
KANE	KAPA	KAPC	KAPF	KAPN	KARA	KARB
KARR	KASE	KASG	KASH	KATW	KAUS	KAVL
KAVP	KAZO	KBAF	KBAK	KBAZ	KBBG	KBCT
KBDL	KBDR	KBEC	KBED	KBFI	KBFL	KBFM
KBGM	KBGR	KBHM	KBIL	KBIS	KBJC	KBKL
KBKT	KBKV	KBLI	KBMG	KBMI	KBNA	KBOI
KBOW	KBPT	KBRO	KBTL	KBTR	KBTV	KBUF
KBUR	KBVI	KBVY	KBZN	KCAE	KCAK	KCCR
KCDW	KCGF	KCGI	KCHA	KCHD	KCHO	KCHS
KCIC	KCID	KCKB	KCLL	KCMA	KCMH	KCMI
KCMY	KCNO	KCNW	KCOS	KCOU	KCPR	KCPS
KCRE	KCRG	KCRP	KCRQ	KCRW	KCSG	KCSM
KCWA	KCWF	KCXO	KCXY	KCYS	KDAB	KDAY
KDBQ	KDEC	KDET	KDHN	KDLH	KDPA	KDSM
KDTN	KDTO	KDTS	KDVT	KDWH	KDXR	KEAU
KECG	KECP	KEDC	KEFD	KEGE	KEKM	KELM
KELP	KEMT	KENW	KERI	KESN	KEUG	KEVB
KEVV	KEWB	KEWN	KEYW	KEZM	KFAR	KFAT
KFAY	KFCM	KFDK	KFFZ	KFIN	KFLG	KFLL
KFLO	KFMN	KFMY	KFNL	KFNT	KFOE	KFOK

KFPR	KFRG	KFSD	KFSM	KFTW	KFTY	KFUL
KFWA	KFWS	KFXE	KFYV	KGCK	KGCN	KGEG
KGEU	KGFK	KGGG	KGJT	KGKY	KGLH	KGLS
KGMU	KGNV	KGON	KGOV	KGPI	KGPM	KGPT
KGRB	KGRI	KGRK	KGRR	KGSO	KGSP	KGTF
KGTR	KGTU	KGUR	KGVT	KGWO	KGYH	KGYI
KGYR	KGYY	KHDC	KHEF	KHFD	KHGR	KHHR
KHIF	KHIO	KHKS	KHKY	KHLG	KHLN	KHND
KHOB	KHPN	KHQZ	KHRL	KHSA	KHSV	KHTO
KHTS	KHUF	KHUM	KHUT	KHVN	KHWD	KHWO
KHXD	KHYA	KHYI	KIAG	KICT	KIDA	KIFP
KILG	KILM	KILN	KIND	KINT	KIPT	KISM
KISO	KISP	KITH	KIWA	KIXD	KJAC	KJAN
KJAX	KJEF	KJLN	KJQF	KJST	KJVL	KJYO
KLAF	KLAL	KLAN	KLAW	KLBB	KLBE	KLCH
KLCK	KLCQ	KLEB	KLEE	KLEX	KLFT	KLGB
KLIT	KLMT	KLNK	KLNS	KLOU	KLRD	KLSE
KLUK	KLVK	KLWB	KLWM	KLWS	KLYH	KLZU
KMAF	KMBS	KMCN	KMDH	KMDT	KMDW	KMEI
KMFD	KMFE	KMFR	KMGM	KMGW	KMHK	KMHR
KMHT	KMHV	KMIC	KMIE	KMKC	KMKE	KMKG
KMKL	KMLB	KMLI	KMLU	KMMU	KMOB	KMOD
KMOT	KMQY	KMRB	KMRY	KMSN	KMSO	KMTN
KMVY	KMWA	KMWC	KMWH	KMYF	KMYR	KNEW
KNGP	KNPA	KNQA	KNSI	KNUC	KNXP	KOAJ
KOAK	KOCF	KOGD	KOJC	KOKC	KOLM	KOLV
KOMA	KOMN	KONT	KOPF	KORF	KORH	KORL
KOSH	KOSU	KOTH	KOUN	KOWB	KOWD	KOXC
KOXR	KPAE	KPAH	KPAO	KPBI	KPDK	KPDT
KPDX	KPGD	KPHF	KPIA	KPIE	KPIH	KPKB
KPMP	KPNE	KPNS	KPOC	KPOU	KPQL	KPRC
KPSC	KPSM	KPSP	KPTK	KPUB	KPVD	KPVU
KPWA	KPWK	KPWM	KRAL	KRAP	KRBD	KRDD
KRDG	KRDM	KRDR	KRDU	KRFD	KRHV	KRIC
KRME	KRNM	KRNO	KRNT	KROA	KROC	KROG

KROW	KRST	KRSW	KRVS	KRYN	KRYY	KSAC
KSAF	KSAT	KSAV	KSAW	KSBA	KSBD	KSBN
KSBP	KSBY	KSCH	KSCK	KSDF	KSDL	KSDM
KSEE	KSFB	KSFF	KSGF	KSGJ	KSGR	KSHV
KSJC	KSJT	KSKF	KSLE	KSLN	KSMF	KSMO
KSMX	KSNA	KSNS	KSPG	KSPI	KSQL	KSRQ
KSSF	KSTC	KSTJ	KSTP	KSTS	KSUA	KSUN
KSUS	KSUX	KSWF	KSWO	KSYR	KTBN	KTCL
KTEB	KTIW	KTIX	KTKI	KTLH	KTMB	KTME
KTOA	KTOI	KTOL	KTOP	KTRI	KTRK	KTTD
KTTN	KTUL	KTUP	KTUS	KTVC	KTWF	KTXK
KTYR	KTYS	KTZR	KUAO	KUES	KUGN	KUNV
KVCT	KVCV	KVGT	KVLD	KVNY	KVQQ	KVRB
KVUJ	KWDG	KWHP	KWJF	KXNA	KYIP	

# Non-towered airports

1B9	2IS	28J	3T5	42J	5B2	65S
6R3	6S8	74S	9G6	C83	E06	E16
E26	E38	F70	KAAO	KABR	KACV	KADG
KADH	KAIA	KAIZ	KAKR	KALI	KALS	KANB
KAOO	KAPV	KART	KARV	KARW	KAST	KATS
KATY	KAUG	KAUN	KAUW	KAVO	KAVQ	KAWM
KAWO	KAXQ	KAXX	KBAM	KBAX	KBCE	KBDH
KBDN	KBEH	KBFD	KBFF	KBGE	KBHB	KBID
KBIE	KBIV	KBJI	KBKE	KBKW	KBKX	KBLF
KBMC	KBMT	KBNG	KBNL	KBPG	KBQK	KBRD
KBRL	KBTM	KBTP	KBUY	KBVS	KBVU	KBWD
KBWG	KBXK	KBXM	KBYY	KCBF	KCDC	KCDN
KCEC	KCEZ	KCFJ	KCGZ	KCIU	KCLM	KCMX
KCNM	KCNY	KCOD	KCOE	KCOI	KCON	KCPK
KCPM	KCQX	KCRS	KCTB	KCTK	KCUB	KCVH
KCVN	KCVO	KCWI	KCXP	KCZG	KCZL	KDAG
KDAN	KDCM	KDDC	KDED	KDEW	KDGW	KDHT
KDIK	KDKB	KDKK	KDKX	KDLO	KDLS	KDLZ
KDNV	KDRO	KDRT	KDTA	KDUJ	KDVL	KDVN

KDVO	KEAR	KEAT	KEBG	KEEN	KEGT	KEHR
KEKN	KEKO	KELD	KELY	KENV	KEPH	KESC
KESF	KEWK	KEYE	KFCH	KFCI	KFDY	KFFC
KFFM	KFHB	KFIG	KFIT	KFKL	KFLX	KFLY
KFOD	KFST	KFZY	KGAD	KGAI	KGBD	KGBG
KGCC	KGCD	KGDV	KGED	KGEY	KGEZ	KGFL
KGGE	KGGW	KGHG	KGIF	KGKJ	KGLD	KGLE
KG00	KGVQ	KGXY	KHAO	KHDN	KHEZ	KHIB
KHII	KHJO	KHNB	KHON	KHOT	KHQM	KHRO
KHSI	KHSP	KHUL	KHVR	KHWV	KHYS	KHZY
KIDP	KIGM	KIGQ	KIJD	KIJX	KIKG	KIKK
KIKV	KILE	KIMM	KIMT	KINK	KINL	KINW
KIPL	KIRK	KIRS	KIXA	KIYK	KIZA	KJAS
KJHW	KJKA	KJMS	KJNX	KJVW	KLAR	KLBF
KLBL	KLBT	KLBX	KLCI	KLDJ	KLEW	KLFK
KLGU	KLHM	KLHV	KLHZ	KLLR	KLLQ	KLNA
KLNC	KLOM	KLOT	KLOZ	KLRU	KLVJ	KLWC
KLWV	KLXT	KMAC	KMBL	KMCC	KMCE	KMCK
KMCW	KMDD	KMEV	KMEZ	KMGC	KMGG	KMGJ
KMGY	KMHE	KMIT	KMIV	KMJX	KMKT	KMKS
KMLE	KMLS	KMMH	KMMV	KMNM	KMNN	KMOP
KMOR	KMPR	KMQI	KMQJ	KMQS	KMSL	KMSS
KMSV	KMTH	KMTJ	KMTO	KMTW	KMUT	KMVN
KMWL	KMWO	KMYV	KOAR	KOBE	KOBI	KODO
KOFK	KOGS	KOKK	KOKV	KOLF	KOLU	KOLY
KONP	KONZ	KOPL	KOQN	KORK	KORS	KOSC
KOTG	KOTM	KOVE	KOWA	KOWP	KOXI	KOZW
KPBF	KPBG	KPCW	KPCZ	KPEQ	KPGA	KPGV
KPHK	KPIB	KPIL	KPIR	KPJC	KPLN	KPNA
KPNC	KPQI	KPRB	KPSF	KPSK	KPTT	KPTV
KPTW	KPUC	KPUJ	KPUW	KPVC	KPVG	KPVW
KPWG	KPWT	KPXE	KPYM	KRAC	KRBG	KRCE
KRHI	KRID	KRIL	KRIW	KRKD	KRKP	KRKS
KRMG	KROS	KRSN	KRTS	KRUE	KRUQ	KRUT
KRWI	KRZR	KSAA	KSBM	KSDY	KSEF	KSFM

KSFZ	KSGH	KSGT	KSHD	KSHR	KSLK	KSME
KSNL	KSOP	KSPA	KSPW	KSQI	KSSR	KSSI
KSUE	KSUT	KSWW	KSXU	KTCS	KTEX	KTHV
KTNP	KTPF	KTPH	KTPL	KTRM	KTVF	KTVL
KTVY	KUBS	KUIN	KUKF	KUNU	KUOX	KUTA
KUUU	KUZA	KVDF	KVHN	KVIS	KVNC	KVPZ
KVVS	KWDR	KWLD	KWMC	KWRL	KWST	KWVI
KWVL	KWWD	KWYS	KXLL	KZPH	KZZV	L35
M54	PACD	PAGA	PAKT	PAOM	PASI	S50
T82	U42	X14	X51			

# Credits

Real Taxiways 2024
Publishing
Manual
Testing

Nicholas Cyganski Just Flight Nicholas Cyganski Just Flight Testing Team

## **Dedication**

This software is dedicated to the Father of Flight Simulation, Bruce Artwick, and the subLOGIC team. Flight simulator enthusiasts, and likely many developers, have little idea of how much remains in Microsoft Flight Simulator (2020) from the original versions of subLOGIC Flight Simulator, released in the early 1980's, more than forty years ago. This heritage is evident nowhere more than in the basis of all flight simulator scenery, the BGL file. BGL stands for BAO Graphical Language, BAO standing for Bruce Artwick Organisation. Through the creation of this addon for Microsoft Flight Simulator, I have had the pleasure of becoming intimately familiar with the ingenious, space-saving, immensely efficient bytecode created by Bruce Artwick for the storage of flight simulator facilities data. This is my small thank-you to Mr. Artwick and his team for creating the hobby that we all love so much, and inspiring generations of software engineers and pilots alike. Thanks to you and your team, I have never felt closer to the pioneers of personal computing, whom I admire so much.

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# COMING SOON





