

# The Great Framerate Reliever

A relatively inexpensive way to soup-up your Flight Simulator *setup* without spending hundreds of dollars in the process.

A Guide Written

by

**Mark R. McCoy**

# TABLE OF CONTENTS

<b>INTRODUCTION</b>	<b>1</b>
INTRODUCTORY TITLE PAGE	
TABLE OF CONTENTS	
<b>WHAT WILL YOU NEED?</b>	<b>3</b>
FLIGHT SIMULATOR (FS9/FSX)	
FSUIPC	
WIDEFS	
SPARE (SIDEKICK) COMPUTER	
ROUTER	
PERIPHERAL PROGRAMS	
<b>THE CONCEPT</b>	<b>4</b>
FLIGHT SIMULATOR (FS9/FSX)	
TYPE CHAPTER TITLE (LEVEL 3)	
<b>GETTING WHAT YOU NEED TOGETHER</b>	<b>5</b>
FLIGHT SIMULATOR (FS9/FSX)	
FSUIPC	
WIDEFS	
SPARE (SIDEKICK) COMPUTER	
<b>THE INSTALLATION</b>	<b>6</b>
SIDEKICK SETUP	
FSUIPC & WIDEFS	
TESTING THE WIDEFS CONNECTION	
TROUBLESHOOTING	
<b>RE-TOOLED FS9.CFG FILE</b>	<b>7</b>
<b>CLOSING</b>	<b>17</b>

NOTE: This guide is merely a suggestion as to how one can make the most of their FS setup without the need for expensive modifications. Thanks to the hard work of many individuals, setups like this are entirely practical and won't have you sitting in the "FS doghouse" with your significant other. ☺

The goal of this guide is to provide you the ability to run your Flight Simulator setup on your primary PC and your FS "peripheral programs" (using a few software tools) on a sidekick PC.

## WHAT WILL YOU NEED?

### - **Flight Simulator**

Look, if you haven't figured this part out yet, then stop right now. This guide won't help you! If you've already printed it, use it for scratch paper and recycle it when you are done.

### - **FSUIPC**

FSUIPC is a freeware module available from Pete Dowson's bag of software tricks, with a few payware features unlockable as needed. Pete is without a doubt one of the best things that could have ever happened to Flight Simulator. Anytime you connect to the VATSIM network or link up a tool to FS like ActiveSky, its via the FSUIPC module.

### - **WideFS**

Another awesome Pete Dowson tool, and the backbone of this guide. WideFS is a separate module developed to allow connections to WideFS over a computer network. Instead of running all of your applications on the same PC with Flight Simulator, WideFS allows you to run them on separate PC's and connect to FS.

### - **Spare Computer running Windows XP Pro (*patched up to date*)**

You may be asking yourself.. "Wait, what? A separate PC? I don't have the money for another computer.. are you out of your mind?" Well, yes partly but that's another story. Unbeknownst to many, a sidekick PC is often available for your use if you know where to look.. and often for free.

### - **Router**

It doesn't need to be wireless, but if you have a wireless laptop available, it can make this sort of installation even more fun (watching TV in the living room while monitoring Squawkbox on your laptop, etc. via a WiFi connection)

### - **Peripheral Programs**

Software that falls into this category is just about anything you use to interact with your Flight Simulator setup. ACARS programs, Squawkbox, FSInn (uses its own version of a "WideFS-type module"), ActiveSky, FS Real Time, etc. Any program that talks to the Flight Simulator module can be run on other PC's in a network

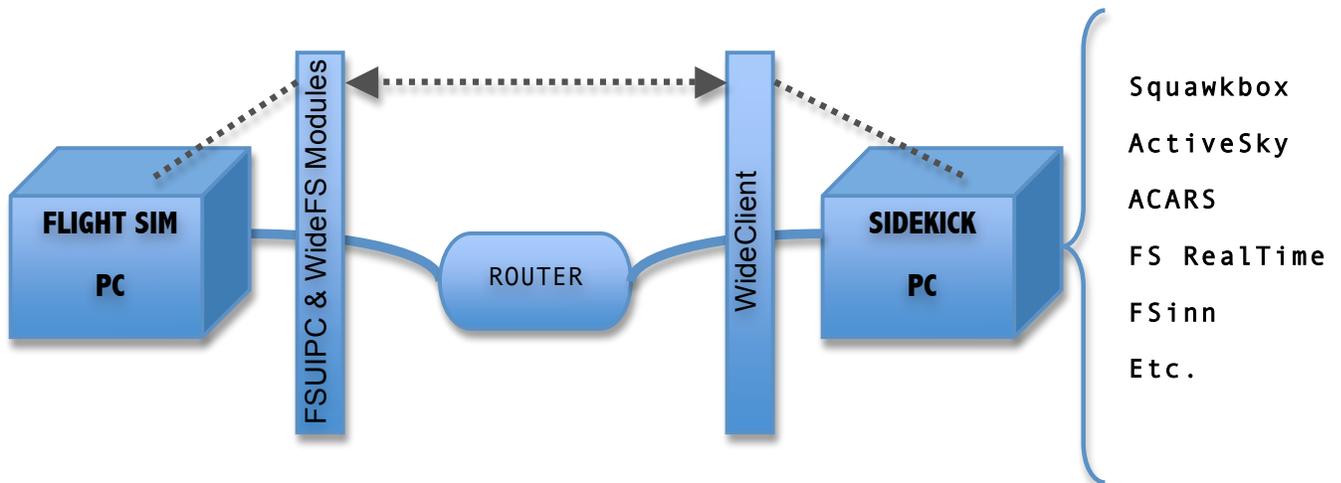
# THE CONCEPT

Imagine loading up your Flight Simulator session, selecting the time, weather, aircraft and departure area and loading your flight. Easy stuff, right? Should be, but at this point you'll likely have to minimize your Flight Simulator session to load Squawkbox, ActiveSky, a flight planner utility, etc. Not so hard, right? Sure, until your buddy instant messages you on Skype, MSN, etc. and wants to chat. At this point, your computer is now calculating your FS position, weather, Squawkbox connection, private message chat and maybe even your chosen web browser to keep you busy in the background.

Your poor computer. Imagine how it would feel if you gave it a break and relieved it of this load? After all, it doesn't help to complain about a loss in frame rates when your PC is trying as hard as possible to compute all of these programs and still give you a great FS performance. If you are like me, you may have a fast PC.. but its not as fast as that young kid on iFDG who's channeled every cent he's earned bussing tables at Pizza Hut into a new video card and 10 sticks of RAM. Unfortunately life has a way of putting your Flight Simulation budget very low on the rung of spare cash.. especially when your lady looks over your shoulder and comments on the \$30 you spent on a payware 737 to use in a game you already paid for. Wait, did she just call this a game?! "*Honey, it's not a game.. it's a simula..*"

Imagine instead, your fast PC running Flight Simulator ONLY. No virus programs running, no chat programs running, no web browser running, etc. Can you imagine the resources you'd free up for your flight simulator PC doing this? Now imagine having a sidekick computer (nothing fast or special, just capable of basic work) running your chat programs, your browser, and of course your FS peripherals like Squawkbox, ActiveSky, FS Real Time, etc. that will automatically "talk" with your FS PC as if they were one-in-the-same. Not only will this improve your Flight Simulator performance, but it will free you up to run Flight Simulator in fullscreen mode and *leave it that way* until you land.

The purpose of this guide is to not only show you how to make this work for you, but to break down how you can do it very cheaply and therefore avoid sleeping on the couch when the missus finds out. ☺ Yes, I have your best interests at heart because like many of you, I have a wife, kids, a job, cars, house, and LOTS of big bills to pay. Fun as it is, Flight Simulator can never replace the personal and professional responsibilities we all have. If I can save you a few bucks this year, and squeeze out a few FPS in the process, then I've done my part.



## GETTING WHAT YOU NEED TOGETHER

If you do this right, the *only* actual monetary cost you'll have is the purchase of Pete Dowson's WideFS module, which at the time of this publication cost \$36.57 (EUR 23.80), and maybe a cheap router from eBay, Craigslist, or your local electronics store.

1. **Flight Simulator** – Believe it or not, I'm still using Flight Simulator 2004/FS9. Why? Because the latest and greatest Flight Simulator focused heavily on changes in environment at the cost of major performance. Unlike so many, I am still not prepared to purchase all sorts of new hardware to boost the performance of my computer just to run Microsoft's 10<sup>th</sup> version of Flight Simulator just yet. Nonetheless, this guide works just fine for both FS9 and FSX. If you don't have Microsoft Flight Simulator 9 or 10, pick one and go get it. The world needs more armchair pilots!
2. **FSUIPC** – Most likely you already have this installed, but just in case you don't, head on over to Pete Dowson's page and download the latest version for your version of Flight Simulator. Follow the installation instructions found in the FSUIPC download – it's very easy, and best of all.. it's free! Pete's webpage can be found here: <http://www.schiratti.com/dowson.html>
3. **WideFS** – As I mentioned before, if done properly, the only cost you will incur in following this guide's instructions is the cost to purchase Pete Dowson's WideFS module. Follow the installation instructions found in the WideFS download. Pete's webpage can be found in the link provided in the FSUIPC step above.
4. **The Sidekick PC** – Naturally this method doesn't work unless you have a sidekick PC to use. For those of you who think it's not practical to use a slower, older PC as a sidekick, consider this.. I ran an old Pentium III gateway machine for almost 4 years as a sidekick running Squawkbox, ActiveSky, Simcharts, Internet, Chat Programs, FSInn, etc. It worked perfectly because the tasks I was asking of it didn't require a fast graphics card or tons of RAM. Just a stable system, even if it was slow. Finding a suitable PC is actually quite easy, as computers are usually on a 4-5 year replacement cycle. Grab the local paper, visit Craigslist.com, visit the local independent PC repair shop. Finding a free moderate PC is actually quite easy if you set your mind to it.
5. **Router** – Routers are very cheap, and prolific too. You can often find a spare router awaiting its final toss into the trashcan at your office. Ask the IT guy if he has a router he's planning to toss out.. there may be nothing wrong with it, it could just have been replaced for a better, or different-capable model for office use and he'll be glad to have you take it off your hands. If you cannot find a free router anywhere, you can usually find a decent model on eBay, Craigslist, or from your local electronics store. If you have a wireless laptop, a wireless router will allow you the ability to take your "sidekick" PC anywhere in your home and monitor your Squawkbox connection, etc. without having to physically sit in front of your FS PC. Lots of fun, I do it all the time.. playing in the backyard with the kids while listening for calls from Atlanta Center on my wireless laptop.

# THE INSTALLATION

Now the fun part. Let's get all of this installed and up and running for you to relieve your PC's burden on Flight Simulator, and enhance your simulation experience.

1. **Sidekick Setup** – If you've located a wireless router, take a few moments to encrypt it. Your neighbors and passersby won't hesitate to take advantage of your free internet access, and some might even take a step to cause your harm. If you have a manual for your router, READ IT and take steps necessary to provide at least some form of encryption. If your router didn't come with a manual, head to the manufacturers webpage and download it.

We'll assume (for the sake of brevity) that you've secured a functional sidekick PC of some sort, and have plugged a cable from the router to the network card in this PC. If all is working well, you should have internet access on the sidekick PC and the basics you prefer to us installed (Firefox, Skype, etc.) outside of Flight Simulator. If you are PC savvy, then you'll understand what needs to be done to the sidekick PC to make it safe to use. If not, at least take the time to download an antivirus program like that found at [www.avast.com](http://www.avast.com) (free) and a malware remover such as Spybot Search & Destroy at [www.safer-network.org](http://www.safer-network.org) (free). These will at least give you some form of protection on the sidekick provided you aren't completely 100% on what it takes to clean it up. If your sidekick is working, proceed to the next step.

2. **FSUIPC & WideFS** – Install FSUIPC and WideFS! Easy stuff. FSUIPC merely needs installation on the FS computer, where WideFS will require installation on both the FS computer and the sidekick computer. Follow the instructions in Pete Dowson's README files, and it'll be a snap.
3. **Testing the WideFS Connection** – WideFS needs to be registered with FSUIPC in order to work, so boot the FS computer, load FS and open the drop-down in FS9/FSX for Modules > FSUIPC and click the Register WideFS button. Use the information provided to you from your Simmarket order of WideFS to properly register WideFS with FSUIPC. Once complete, apply the changes and close FS9/FSX.

Reload FS9/FSX and set your aircraft somewhere safe in the Flight Simulator universe. The WideServer modules installed on the FS computer as a part of the WideFS package will load automatically. On the sidekick PC, open the WideClient program installed on this computer as a part of the WideFS installation. The WideFS status displayed in the WideClient window on the sidekick PC and the statusbar at the top of your FS9/FSX PC should say – connected. Viola! That's it! Your sidekick PC is now ready to run your FS software peripherals. Go ahead and load up ActiveSky, Squawkbox, your ACARS program, etc. on the Sidekick PC. Pretty neat, huh? They are interacting directly with your FS9 PC's FSUIPC module automatically, and you don't even have to minimize the FS9/FSX window.

4. **Troubleshooting** – Problems happen. In fact, I don't think I can personally recall a time when everything installed perfectly and worked right off the bat. This is no different. In order for this setup to work, you need two working PC's networked via a router (or other suitable network) to see and interact with each other. It's highly likely that a few things will need to be slightly changed and retooled to make everything work just right. If you are experiencing difficulty with your setup, please visit Peter Dowson's Support Forum here: <http://forums.simflight.com/viewforum.php?f=54>. As a last resort, yes you may contact me for suggestions or feedback, though it may take me a bit to get back to you. My email address is markrmccoy (at) gmail (dot) com. I'll be happy to lend a hand to you if I can.

## RE-TOOLED FS9.CFG FILE

\*\*\* FOR FS9 ONLY – THIS FILE WILL NOT WORK WITH FSX \*\*\*

About a year ago, a good friend of mine shared a re-tooled FS9.cfg file which he explained contained a number of backend changes to the default FS9.cfg file allowing for a smoother simulation, and freeing up more FPS. Granted I was skeptical, but after a quick backup of my then-current FS9.cfg file, I opted to give it a shot. Since that day, I've never looked back. While I haven't spent the time to discover what exactly it is about this particular .cfg file that sets it apart from the stock file, I can attest to its ability to retain FPS – noticeably so. I've included the contents of that file here for you to use and share in the hopes that it too will also help you.

First, navigate to your Documents and Settings\User\Application Data\Microsoft\FS9 folder. In this folder, you should see a few files – specifically one called FS9.cfg. This is a simple file in which FS writes your individual settings, and tells the program how to load your simulator. MAKE A BACKUP OF THIS FILE BEFORE PROCEEDING. While I have no reason to believe that this will cause any real problems for you, it never hurts to have a backup handy in case you make a mistake, etc.

Second, open Notepad. Save a blank notepad file with the name FS9.cfg, and save it to your Documents and Settings\User\Application Data\Microsoft\FS9 folder. This will overwrite the previous FS9.cfg file, but that's ok – especially if you made a backup. ☺

Third, copy all of the text listed beneath the line below by using the Select Text function in Adobe Reader. Open the blank FS9.cfg file you just saved in your Documents and Settings\User\Application Data\Microsoft\FS9 folder and paste the contents you just copied from this PDF. Save the file and exit.

Fourth, load FS9. That's it! For simplicity, I've also included a copy of this FS9.cfg file in this download. You are welcome to simply copy the FS9.cfg file included in this package and paste it to your Documents and Settings\User\Application Data\Microsoft\FS9 folder, overwriting the existing FS9.cfg.

--- COPY ALL TEXT BELOW THIS LINE ----

---

```
[PANELS]
IMAGE_QUALITY=1
UNITS_OF_MEASURE=0
QUICKTIPS=1
PANEL_MASKING=1
PANEL_STRETCHING=1
[Weather]
WindshieldPrecipitationEffects=1
MinGustTime=10
MaxGustTime=500
MinGustRampSpeed=1
MaxGustRampSpeed=200
MinVarTime=5
MaxVarTime=50
MinVarRampSpeed=10
MaxVarRampSpeed=75
TurbulenceScale=1.000000
DefaultVisibility=0
DynWx_MedianDewPointSpread=10.000000
DynWx_ProbCloudFormForMedianDewPoint=0.000500
DynWx_MaxDewPointSpread=50.000000
DynWx_ProbCloudFormForMaxDewPoint=0.000125
DynWx_ProbCloudFormForMinDewPoint=0.100000
DynWx_DryTempLapsePer1000Meters=9.000000
DynWx_ProbCloudFormForDryTempLapse=0.000500
DynWx_MoistTempLapsePer1000Meters=3.300000
DynWx_ProbCloudFormForMoistTempLapse=0.040000
DynWx_MaxProbCloudChangePerMinute=0.040000
DynWx_MultiplierForDynamicWeatherLevelMild=0.500000
DynWx_MultiplierForDynamicWeatherLevelNormal=1.000000
DynWx_MultiplierForDynamicWeatherLevelHigh=3.000000
```

```

DynWx_MultiplierForDynamicWeatherLevelExtreme=10.000000
DynWx_TempChangePercentageForOvercastClouds=0.750000
DynWx_TempChangePercentageForMinDewPoint=0.700000
DynWx_MaxTempChangePerMinute=0.060000
WeatherServerAddress=fs2k.zone.com
WeatherServerPort=80
WeatherGraphDataInDialog=0
DynamicWeather=2
LOADWEATHER=1
MAX_UNLIMITED_VIS=144840
CLOUD_DRAW_DISTANCE=4
3D_CLOUD_PERCENT=40
DETAILED_CLOUDS=1
CLOUD_COVERAGE_DENSITY=6
CloudsImpostorRingRadius=25600.000000
DownloadWindsAloft=1
DisableTurbulence=0
[INTERNATIONAL]
ASLAT=2
ASLON=1
MEASURE=0
[MISC]
COM_RATE=7
LOG_TIME=0
FOREIGN_TRANSLATOR=0
LOG_FILE=LOGBOOK
[STARTUP]
DEMO=0
LOADSIM=1
LOADWINDOW=1
SHOW_OPENING_SCREEN=1
STARTUP_DEMO=
[GRAPHICS]
FULL_SCREEN=1
PERFORMANCE_MODE=0
DEF_PERF_MODE=6
TEXT_SCROLL=1
AUTO_LOD=0
DETAIL_TEXTURE=2
WATER_EFFECTS=1
TERRAIN_USE_VECTOR_MAP=1
TERRAIN_USE_VECTOR_OBJECTS=1
EFFECTS_QUALITY=0
GROUND_SHADOWS=0
SMOOTH_VIEW=1
IMAGE_SMOOTHING=1
TEXTURE_MAX_LOAD=256
COCKPIT_HIGH_LOD=1
AIRCRAFT_SHADOWS=1
LANDING_LIGHTS=1
IMAGE_QUALITY=0
TEXTURE_BLDG=1
TEXTURE_GND=1
TEXTURE_WATER=1
AIRCRAFT_TEXTURE=1
SEE_SELF=1
TEXTURE_QUALITY=3
LOD_TARGET_FPS=21
NUM_LIGHTS=6
[REALISM]
INDASPD=0
PFactor=1.000000
Torque=1.000000
GyroEffect=1.000000
CrashTolerance=0.880000
General=1.000000
UnlimitedFuel=False
TrueAirspeed=False
AutoCoord=False
RealMixture=True
StressDamage=True
GEffect=True
ManualLights=True
GyroDrift=False

```

```

CrashWithDyn=False
CrashDetection=1
[CONTROLS]
KBDAIL=64
KBDELEV=64
KBDRUD=64
PAN_RATE=900
[USERINTERFACE]
MAP_ORIENTATION=2
PAUSE_ON_LOST_FOCUS=0
PROMPT_ON_EXIT=1
SelectFlightLevel=0
SelectFlightTitle=0
PageID=3
OpenATCOnCreate=0
SITUATION=
DisplayFuelAsWeight=0
[SOUND]
SOUND=1
SOUND_FADER1=0.300000
SOUND_FADER2=0.100000
SOUND_FADER3=0.220000
SOUND_FADER4=0.800000
SOUND_FADER5=0.170000
SOUND_FADER6=0.750000
SOUND_QUALITY=2
RenderToTexture=0
[DISPLAY]
UPPER_FRAMERATE_LIMIT=30
TEXTURE_BANDWIDTH_MULT=400
[TERRAIN]
TERRAIN_ERROR_FACTOR=100.000000
TERRAIN_MIN_DEM_AREA=10.000000
TERRAIN_MAX_DEM_AREA=100.000000
TERRAIN_MAX_VERTEX_LEVEL=20
TERRAIN_TEXTURE_SIZE_EXP=8
TERRAIN_AUTOGEN_DENSITY=2
TERRAIN_USE_GRADIENT_MAP=1
TERRAIN_EXTENDED_TEXTURES=1
TERRAIN_DEFAULT_RADIUS=9.000000
TERRAIN_EXTENDED_RADIUS=9.000000
TERRAIN_EXTENDED_LEVELS=232
[SCENERY]
IMAGE_COMPLEXITY=3
DYNAMIC_SCENERY=1
DYN_SCN_DENSITY=3
DAWN_DUSK_SMOOTHING=1
SUNGLARE=1
LENSFLARE=0
[AIRtoCONTAINER]
SIM1=Cessna Skylane 182R RG
SIM2=Learjet 45
SIM3=Schweizer 2-32 Sailplane
SIM4=Sopwith Camel
SIM5=Extra 300S
SIM6=Boeing 737-400
[APL]
CACHE_WAV_FILES=1
[TrafficManager]
TrafficDensity=100
IFROnly=0
EnableAirline=1
EnableGeneralAviation=1
[AContain]
ShowLabels=0
ShowUserLabel=0
ShowLabelManufacturer=0
ShowLabelModel=0
ShowLabelTailNumber=1
ShowLabelDistance=0
ShowLabelAltitude=0
ShowLabelAirline=0
ShowLabelAirlineAndFlightNumber=0
ShowLabelFlightPlan=0

```

```

ShowLabelContainerId=0
ShowLabelAirspeed=0
ShowLabelHeading=0
LabelDelay=1000
LabelColor=FFFF9900
[SLEW]
MaxLateralRate=40000.000000
MaxVerticalRate=1000.000000
MaxPitchRate=360.000000
MaxBankRate=360.000000
MaxHeadingRate=360.000000
[VirtualCopilot]
VirtualCopilotActive=0
[MAIN]
Maximized=0
Location=0,0,1152,864
HideMenuNormal=0
HideMenuFullscreen=1
[MULTIPLAYER]
ALWAYS_SHOW_INITIAL_DIALOG=1
SESSION_NAME=SquawkBox (gateway-cekb5t1)
PLAYER_NAME=DAL1728
GUARANTEED_MESSAGES=0
MAX_PLAYERS=8
MAX_OBSERVERS=0
TICKS_PER_SYNC=90
PACKETS_PER_SEC=4
COLLISION_SECS=2
FOLLOWING_MULTIPLIER=5
ALLOW_PLANE_MODEL_SEND=0
ALLOW_PLANE_MODEL_RECEIVE=0
ALLOW_TEXTURE_SEND=0
ALLOW_TEXTURE_RECEIVE=0
MAX_SEGMENT_SIZE=100
MAX_SEGMENTS_PER_SEC=1
CONNECTION_TYPE=0
PROTOCOL_SELECTION=0
ALLOW_DESCRIPTIVE_SEND=1
ALLOW_DESCRIPTIVE_RECEIVE=1
AUTOPILOT_LOCK=0
DISTANCE_DISPLAY=0
ADF_TRACK=0
ALLOW_NAME_TAG_DISPLAY=1
CLIENT_CONNECT_USE_CUSTOM_PORT=0
CLIENT_CONNECT_PORT=23456
CLIENT_HOST_USE_CUSTOM_PORT=0
CLIENT_HOST_PORT=23456
HOST_CONNECT_USE_CUSTOM_PORT=0
HOST_CONNECT_PORT=23456
IP_ADDRESS=
PROTOCOL_ADDRESS=
[SIM]
SYSCLOCK=0
[ATC]
AutoOpenAirTrafficWindow=1
UsePilotVoice=1
ShowATCText=1
PilotVoice=1
[FACILITIES]
COUNTRY=
STATE=
CITY=
GTL_BUTTON=6225
[JOYSTICK_MAIN {6B5DBB50-B4DC-11D9-8001-444553540000}]
AXIS_EVENT_00=AXIS_AILERONS_SET
AXIS_SCALE_00=64
AXIS_NULL_00=36
AXIS_EVENT_01=AXIS_ELEVATOR_SET
AXIS_SCALE_01=45
AXIS_NULL_01=36
AXIS_EVENT_02=AXIS_THROTTLE_SET
AXIS_SCALE_02=127
AXIS_NULL_02=1
AXIS_EVENT_05=AXIS_RUDDER_SET

```

```

AXIS_SCALE_05=64
AXIS_NULL_05=36
BUTTON_DOWN_EVENT_00=BRAKES
BUTTON_DOWN_REPEAT_00=1
BUTTON_DOWN_EVENT_01=VIEW_MODE
BUTTON_DOWN_EVENT_02=ELEV_TRIM_DN
BUTTON_DOWN_REPEAT_02=1
BUTTON_DOWN_EVENT_03=ELEV_TRIM_UP
BUTTON_DOWN_REPEAT_03=1
BUTTON_DOWN_EVENT_04=FLAPS_INCR
BUTTON_DOWN_EVENT_05=FLAPS_DECR
BUTTON_DOWN_EVENT_06=KNEEBOARD_VIEW
BUTTON_DOWN_EVENT_07=GEAR_TOGGLE
BUTTON_DOWN_EVENT_08=VIEW_MODE
BUTTON_DOWN_EVENT_09=GEAR_TOGGLE
POV_MOVE_EVENT_00=PAN_VIEW
POV_MOVE_REPEAT_00=1
[JOYSTICK_SLEW {6B5DBB50-B4DC-11D9-8001-444553540000}]
AXIS_EVENT_00=AXIS_SLEW_SIDEWAYS_SET
AXIS_SCALE_00=64
AXIS_NULL_00=36
AXIS_EVENT_01=AXIS_SLEW_AHEAD_SET
AXIS_SCALE_01=45
AXIS_NULL_01=36
AXIS_EVENT_05=AXIS_SLEW_HEADING_SET
AXIS_SCALE_05=64
AXIS_NULL_05=36
BUTTON_DOWN_EVENT_00=SLEW_RESET
BUTTON_DOWN_EVENT_01=VIEW_MODE
BUTTON_DOWN_EVENT_02=SLEW_ALTIT_PLUS
BUTTON_DOWN_EVENT_03=SLEW_ALTIT_MINUS
BUTTON_DOWN_EVENT_04=SLEW_PITCH_PLUS
BUTTON_DOWN_EVENT_05=SLEW_PITCH_MINUS
BUTTON_DOWN_EVENT_06=SLEW_BANK_MINUS
BUTTON_DOWN_EVENT_07=SLEW_BANK_PLUS
BUTTON_DOWN_EVENT_08=SLEW_FREEZE
BUTTON_DOWN_EVENT_09=SLEW_RESET
POV_MOVE_EVENT_00=PAN_VIEW
POV_MOVE_REPEAT_00=1
[DISPLAY.Device.RADEON X300/X550 Series.0]
Mode=1280x960x32
TriLinear=1
AntiAlias=1
[WEATHER_MAP]
SHOW_AIRPORTS=0
SHOW_VORS=0
SHOW_NDBS=0
SHOW_APPROACHES=0
SHOW_INTERSECTIONS=0
SHOW_VICTOR=0
SHOW_JET=0
SHOW_AIRSPACE=0
SHOW_FLIGHTPLAN=1
SHOW_WEATHERSTATIONS=1
SHOW_WEATHERSYSTEMS=1
SHOW_DATATAGS=1
SHOW_TERRAIN=1
[WeatherAreaMap]
show_airports=0
show_waypoints=0
show_airways=1
show_vors=0
show_ndbs=0
show_markers=0
show_volume_boundaries=0
show_ac_twr=1
[RWW_WEATHER_MAP]
SHOW_AIRPORTS=0
SHOW_VORS=0
SHOW_NDBS=0
SHOW_APPROACHES=0
SHOW_INTERSECTIONS=0
SHOW_VICTOR=0
SHOW_JET=0

```

```

SHOW_AIRSPACE=0
SHOW_FLIGHTPLAN=1
SHOW_WEATHERSTATIONS=1
SHOW_WEATHERSYSTEMS=1
SHOW_DATATAGS=1
SHOW_TERRAIN=1
[MAPVIEW_MAP]
SHOW_AIRPORTS=1
SHOW_VORS=1
SHOW_NDBS=1
SHOW_APPROACHES=1
SHOW_INTERSECTIONS=0
SHOW_VICTOR=0
SHOW_JET=0
SHOW_AIRSPACE=1
SHOW_FLIGHTPLAN=1
SHOW_WEATHERSTATIONS=0
SHOW_WEATHERSYSTEMS=0
SHOW_DATATAGS=1
SHOW_TERRAIN=1
show_flight_history=1
[FlightPlanMap]
SHOW_AIRPORTS=1
SHOW_VORS=1
SHOW_NDBS=1
SHOW_APPROACHES=0
SHOW_INTERSECTIONS=1
SHOW_VICTOR=0
SHOW_JET=0
SHOW_AIRSPACE=1
SHOW_FLIGHTPLAN=1
SHOW_WEATHERSTATIONS=0
SHOW_WEATHERSYSTEMS=0
SHOW_DATATAGS=1
SHOW_TERRAIN=1
show_waypoints=1
show_airways=1
show_markers=0
show_volume_boundaries=1
show_ac_twr=1
[FrameCallNoWarn]
Gee Bee R-2 v3=1
Cessna 152=1
Piper Tomahawk=1
Porter Pilatus=1
Porter Pilatus ER=1
[DISPLAY.Device.NVIDIA GeForce4 MX 420.0]
Mode=1280x960x16
TriLinear=1
[JOYSTICK_MAIN {CE8C4070-E874-11DB-8002-444553540000}]
  AXIS_EVENT_05=AXIS_RUDDER_SET
  AXIS_SCALE_05=64
  AXIS_NULL_05=36
  BUTTON_DOWN_REPEAT_00=1
  BUTTON_DOWN_REPEAT_02=1
  BUTTON_DOWN_REPEAT_03=1
  BUTTON_DOWN_EVENT_08=VIEW_MODE
  BUTTON_DOWN_EVENT_09=GEAR_TOGGLE
[JOYSTICK_MAIN {E6CC1370-E614-11DB-8001-444553540000}]
  AXIS_EVENT_00=AXIS_AILERONS_SET
  AXIS_SCALE_00=64
  AXIS_NULL_00=36
  AXIS_EVENT_01=AXIS_ELEVATOR_SET
  AXIS_SCALE_01=64
  AXIS_NULL_01=36
  AXIS_EVENT_02=AXIS_THROTTLE_SET
  AXIS_SCALE_02=127
  AXIS_NULL_02=1
  BUTTON_DOWN_EVENT_00=SPOILERS_TOGGLE
  BUTTON_DOWN_REPEAT_02=1
  BUTTON_DOWN_EVENT_03=VIEW_MODE
  BUTTON_DOWN_EVENT_04=BRAKES
  BUTTON_DOWN_REPEAT_04=1
  BUTTON_DOWN_EVENT_05=GEAR_TOGGLE

```

```

BUTTON_DOWN_EVENT_07=THROTTLE_DECR
BUTTON_DOWN_REPEAT_07=1
BUTTON_DOWN_EVENT_08=VIEW_MODE
BUTTON_DOWN_EVENT_09=GEAR_TOGGLE
BUTTON_DOWN_EVENT_11=FLAPS_DECR
BUTTON_DOWN_EVENT_13=FLAPS_INCR
BUTTON_DOWN_EVENT_19=ENGINE_AUTO_START
BUTTON_DOWN_EVENT_20=ENGINE_AUTO_SHUTDOWN
BUTTON_DOWN_EVENT_21=PARKING BRAKES
BUTTON_DOWN_EVENT_22=TOGGLE_PUSHBACK
POV_MOVE_EVENT_00=PAN_VIEW
POV_MOVE_REPEAT_00=1
[DISPLAY.Device.RADEON Radeon X300/X550/X1050 Series.0]
Mode=1280x960x32
[OLDMODULES]
FSsound.dll=1
SOARRec.dll=1
[JOYSTICK_MAIN {26E44900-D0A4-11DA-8001-444553540000}]
AXIS_EVENT_00=AXIS_AILERONS_SET
AXIS_SCALE_00=64
AXIS_NULL_00=36
AXIS_EVENT_01=AXIS_ELEVATOR_SET
AXIS_SCALE_01=64
AXIS_NULL_01=36
AXIS_EVENT_02=AXIS_THROTTLE_SET
AXIS_SCALE_02=127
AXIS_NULL_02=1
AXIS_EVENT_05=AXIS_RUDDER_SET
AXIS_SCALE_05=64
AXIS_NULL_05=36
BUTTON_DOWN_EVENT_00=BRAKES
BUTTON_DOWN_REPEAT_00=1
BUTTON_DOWN_EVENT_01=VIEW_MODE
BUTTON_DOWN_EVENT_02=ELEV_TRIM_DN
BUTTON_DOWN_REPEAT_02=1
BUTTON_DOWN_EVENT_03=ELEV_TRIM_UP
BUTTON_DOWN_REPEAT_03=1
BUTTON_DOWN_EVENT_04=FLAPS_INCR
BUTTON_DOWN_EVENT_05=FLAPS_DECR
BUTTON_DOWN_EVENT_06=KNEEBOARD_VIEW
BUTTON_DOWN_EVENT_07=GEAR_TOGGLE
BUTTON_DOWN_EVENT_08=VIEW_MODE
BUTTON_DOWN_EVENT_09=EYEPOINT_RESET
POV_MOVE_EVENT_00=PAN_VIEW
POV_MOVE_REPEAT_00=1
[JOYSTICK_SLEW {26E44900-D0A4-11DA-8001-444553540000}]
AXIS_EVENT_00=AXIS_SLEW_SIDEWAYS_SET
AXIS_SCALE_00=64
AXIS_NULL_00=36
AXIS_EVENT_01=AXIS_SLEW_AHEAD_SET
AXIS_SCALE_01=64
AXIS_NULL_01=36
AXIS_EVENT_05=AXIS_SLEW_HEADING_SET
AXIS_SCALE_05=64
AXIS_NULL_05=36
BUTTON_DOWN_EVENT_00=SLEW_RESET
BUTTON_DOWN_EVENT_01=VIEW_MODE
BUTTON_DOWN_EVENT_02=SLEW_ALTIT_PLUS
BUTTON_DOWN_EVENT_03=SLEW_ALTIT_MINUS
BUTTON_DOWN_EVENT_04=SLEW_PITCH_PLUS
BUTTON_DOWN_EVENT_05=SLEW_PITCH_MINUS
BUTTON_DOWN_EVENT_06=SLEW_BANK_MINUS
BUTTON_DOWN_EVENT_07=SLEW_BANK_PLUS
BUTTON_DOWN_EVENT_08=SLEW_FREEZE
BUTTON_DOWN_EVENT_09=SLEW_RESET
POV_MOVE_EVENT_00=PAN_VIEW
POV_MOVE_REPEAT_00=1
[DISPLAY.Device.Radeon X300/X550/X1050 Series (Omega 3.8.442).0]
Mode=1152x864x32
TriLinear=1
[KEYBOARD_MAIN]
SELECT_1=49,8
SELECT_2=50,8
SELECT_3=51,8

```

SELECT\_4=52,8  
MINUS=189,8  
PLUS=187,8  
ZOOM\_1X=8,8  
SOUND\_TOGGLE=81,8  
ENGINE=69,8  
SIM\_RATE=82,8  
XPNDR=84,8  
SLEW\_TOGGLE=89,8  
EGT=85,8  
SMOKE\_TOGGLE=73,8  
STROBES\_TOGGLE=79,8  
PAUSE\_TOGGLE=80,8  
REFRESH\_SCENERY=187,11  
ATC=192,8  
ADF=65,8  
VIEW\_MODE=83,8  
HEADING\_GYRO\_SET=68,8  
DME=70,8  
GEAR\_TOGGLE=71,8  
ANTI\_ICE\_TOGGLE=72,8  
JET\_STARTER=74,8  
JOYSTICK\_CALIBRATE=75,10  
ALL\_LIGHTS\_TOGGLE=76,11  
SITUATION\_SAVE=186,8  
AP\_MASTER=90,8  
FREQUENCY\_SWAP=88,8  
COM\_RADIO=67,8  
VOR\_OBS=86,8  
BAROMETRIC=66,8  
NAV\_RADIO=78,8  
MAGNETO=77,8  
BRAKES=190,8  
SPOILERS\_TOGGLE=191,8  
SITUATION\_RESET=186,10  
FLAPS\_UP=116,8  
THROTTLE\_FULL=115,8  
THROTTLE\_INCR\_SMALL=114,8  
THROTTLE\_DECR=113,8  
FLAPS\_DOWN=119,8  
THROTTLE\_CUT=112,8  
ELEV\_TRIM\_DN=36,8  
ELEV\_DOWN=38,8  
INCREASE\_THROTTLE=33,8  
AILERONS\_LEFT=37,8  
CENTER\_AILER\_RUDDER=12,8  
AILERONS\_RIGHT=39,8  
ELEV\_TRIM\_UP=35,8  
ELEV\_UP=40,8  
DECREASE\_THROTTLE=34,8  
VIEW\_FORWARD=38,41  
VIEW\_FORWARD\_RIGHT=33,41  
VIEW\_RIGHT=39,41  
VIEW\_REAR\_RIGHT=34,41  
VIEW\_REAR=40,41  
VIEW\_REAR\_LEFT=35,41  
VIEW\_LEFT=37,41  
VIEW\_FORWARD\_LEFT=36,41  
VIEW\_DOWN=12,41  
RUDDER\_LEFT=45,8  
RUDDER\_RIGHT=135,8  
BRAKES\_LEFT=122,8  
BRAKES\_RIGHT=123,8  
AP\_ATT\_HOLD=84,10  
AP\_LOC\_HOLD=79,10  
AP\_APR\_HOLD=65,10  
AP\_HDG\_HOLD=72,10  
AP\_ALT\_HOLD=90,10  
AP\_WING\_LEVELER=86,10  
AP\_BC\_HOLD=66,10  
AP\_NAV1\_HOLD=78,10  
EXIT=67,10  
ABORT=3,10  
READOUTS\_FLIGHT=90,9

PANEL\_TOGGLE=219,9  
VIEW\_MODE\_REV=83,9  
PANEL\_LIGHTS\_TOGGLE=76,9  
LANDING\_LIGHTS\_TOGGLE=76,10  
PARKING\_BRAKES=190,10  
MINUS\_SHIFT=189,9  
PLUS\_SHIFT=187,9  
FLAPS\_INCR=118,8  
FLAPS\_DECR=117,8  
PROP\_PITCH\_LO=115,10  
PROP\_PITCH\_INCR\_SMALL=114,10  
PROP\_PITCH\_HI=112,10  
MIXTURE\_RICH=115,11  
MIXTURE\_INCR\_SMALL=114,11  
MIXTURE\_DECR=113,11  
MIXTURE\_LEAN=112,11  
SCRIPT\_EVENT\_1=219,10  
SCRIPT\_EVENT\_2=221,10  
YAW\_DAMPER\_TOGGLE=68,10  
CENTER\_NT361\_CHECK=57,11  
CLOSE\_VIEW=221,8  
NEW\_VIEW=219,8  
NEW\_MAP=221,9  
NEXT\_VIEW=9,10  
PREV\_VIEW=9,11  
VIEW\_TYPE=83,10  
VIEW\_TYPE\_REV=83,11  
RADIO\_VOR1\_IDENT\_TOGGLE=49,10  
RADIO\_VOR2\_IDENT\_TOGGLE=50,10  
RADIO\_DME1\_IDENT\_TOGGLE=52,10  
RADIO\_ADF\_IDENT\_TOGGLE=53,10  
GEAR\_PUMP=71,10  
SPOILERS\_ARM\_TOGGLE=191,9  
PITOT\_HEAT\_TOGGLE=72,9  
AP\_AIRSPEED\_HOLD=82,10  
AUTO\_THROTTLE\_ARM=82,9  
AUTO\_THROTTLE\_TO\_GA=71,11  
LANDING\_LIGHT\_UP=38,11  
LANDING\_LIGHT\_DOWN=40,11  
LANDING\_LIGHT\_LEFT=37,11  
LANDING\_LIGHT\_RIGHT=39,11  
LANDING\_LIGHT\_HOME=12,11  
PAN\_RESET=46,9  
KNEEBOARD\_VIEW=121,8  
MP\_PLAYER\_CYCLE=84,11  
MP\_PLAYER\_SNAP=70,11  
MP\_GO\_OBSERVER=79,11  
MP\_CHAT=221,11  
MP\_ACTIVATE\_CHAT=13,8  
PANEL\_1=49,9  
PANEL\_2=50,9  
PANEL\_3=51,9  
PANEL\_4=52,9  
PANEL\_5=53,9  
PANEL\_6=54,9  
PANEL\_7=55,9  
PANEL\_8=56,9  
PANEL\_9=57,9  
AP\_MACH\_HOLD=77,10  
VIEW\_FORWARD\_UP=38,42  
VIEW\_FORWARD\_RIGHT\_UP=33,42  
VIEW\_REAR\_RIGHT\_UP=34,42  
VIEW\_REAR\_UP=40,42  
VIEW\_REAR\_LEFT\_UP=35,42  
VIEW\_FORWARD\_LEFT\_UP=36,42  
VIEW\_UP=12,42  
ENGINE\_AUTO\_START=69,10  
INC\_COWL\_FLAPS=86,11  
DEC\_COWL\_FLAPS=67,11  
USER\_INTERRUPT=27,8  
AILERON\_TRIM\_LEFT=111,8  
AILERON\_TRIM\_RIGHT=109,8  
RUDDER\_TRIM\_LEFT=45,10  
RUDDER\_TRIM\_RIGHT=135,10

TOGGLE\_FLIGHT\_DIRECTOR=70,10  
TOGGLE\_AFTERBURNER=115,9  
TOGGLE\_MASTER\_BATTERY\_ALTERNATOR=77,9  
TOGGLE\_GPS\_DRIVES\_NAVI=78,11  
INCREASE\_CONCORDE\_NOSE\_VISOR\_FULLY=190,11  
DECREASE\_CONCORDE\_NOSE\_VISOR\_FULLY=188,11  
TOGGLE\_AIRCRAFT\_EXIT=69,9  
TOGGLE\_WING\_FOLD=191,11  
TOGGLE\_TAIL\_HOOK\_HANDLE=220,8  
PANEL\_HUD\_TOGGLE=87,8  
SNAP\_TO\_PANEL=45,41  
MARKER\_SOUND\_TOGGLE=51,10  
TOGGLE\_WATER\_RUDDER=87,9  
TOGGLE\_PUSHBACK=80,9  
KEY\_CHASE\_VIEW\_NEXT=87,10  
KEY\_CHASE\_VIEW\_PREV=87,11  
HEADING\_BUG\_SELECT=72,11  
ALTITUDE\_BUG\_SELECT=90,11  
CHASE\_VIEW\_TOGGLE=81,10  
EYEPOINT\_UP=13,9  
EYEPOINT\_DOWN=8,9  
EYEPOINT\_RIGHT=13,11  
EYEPOINT\_LEFT=8,11  
EYEPOINT\_FORWARD=8,10  
EYEPOINT\_BACK=13,10  
EYEPOINT\_RESET=32,8  
AIRSPEED\_BUG\_SELECT=82,11  
TOGGLE\_TAILWHEEL\_LOCK=71,9  
ROTOR\_BRAKE=66,9  
ROTOR\_CLUTCH\_SWITCH\_TOGGLE=190,9  
ROTOR\_GOV\_SWITCH\_TOGGLE=188,9  
VIRTUAL\_COPILOT\_TOGGLE=88,11  
VIRTUAL\_COPILOT\_ACTION=88,10  
PROP\_PITCH\_DECR\_SMALL=113,10  
[KEYBOARD\_SLEW]  
SLEW\_TOGGLE=89,8  
SLEW\_ALTIT\_UP\_FAST=115,8  
SLEW\_ALTIT\_UP\_SLOW=114,8  
SLEW\_ALTIT\_FREEZE=113,8  
SLEW\_ALTIT\_DN\_FAST=112,8  
SLEW\_ALTIT\_PLUS=81,8  
SLEW\_ALTIT\_MINUS=65,8  
SLEW\_PITCH\_DN\_FAST=119,8  
SLEW\_PITCH\_DN\_SLOW=118,8  
SLEW\_PITCH\_FREEZE=117,8  
SLEW\_PITCH\_UP\_FAST=116,8  
SLEW\_PITCH\_PLUS=57,8  
SLEW\_PITCH\_MINUS=48,8  
READOUTS\_SLEW=90,9  
SLEW\_BANK\_MINUS=36,8  
SLEW\_AHEAD\_PLUS=38,8  
SLEW\_BANK\_PLUS=33,8  
SLEW\_LEFT=37,8  
SLEW\_FREEZE=12,8  
SLEW\_RIGHT=39,8  
SLEW\_HEADING\_MINUS=35,8  
SLEW\_AHEAD\_MINUS=40,8  
SLEW\_HEADING\_PLUS=34,8  
SLEW\_RESET=32,8  
TOGGLE\_AIRCRAFT\_LABELS=76,11  
EYEPOINT\_UP=13,9  
EYEPOINT\_DOWN=8,9  
EYEPOINT\_RIGHT=13,11  
EYEPOINT\_LEFT=8,11  
EYEPOINT\_FORWARD=8,10  
EYEPOINT\_BACK=13,10

---

----- COPY ALL TEXT ABOVE THIS LINE -----

## IN CLOSING

Thank you for taking the time to try this out. I am a die-hard realism enthusiast, and reducing my resource usage and increasing FPS without breaking the bank is the quest of all flight simmers. While I am still currently an FS9 user, this guide (excluding the FS9.cfg file section) is the same within FSX and works in almost exactly the same way. If it works for you, wonderful! I've found that I would prefer the Sidekick via WideFS setup even in the absence of frame rate savings due to the flexibility I can achieve while keeping the Flight Simulation window in full-screen mode. Each person is different, so feel free to modify these instructions to your own liking on an individual basis.

### \*\*\*\*NOTE\*\*\*\*

This guide is just that, a guide. While I have no reason to doubt the safety and effectiveness of the instructions provided in this guide, I make no warranties to such. Use this at your own risk! I cannot and will not be responsible for any issues resulting from your use of this guide.

### Thanks to Pete Dowson

In looking back at the long list of individuals who have furthered this hobby to where it is and continues to grow from today, I would find it hard not to place Pete Dowson in one of the highest, most respected of these. Over the years Pete has found a safe way to connect to and from Microsoft Flight Simulator, setting the stage for what would become SATCO, and eventually VATSIM through his hard work and efforts. While some products do cost a small price, Pete has kept the core module FSUIPC free and for that I am eternally grateful. A big thank you to you Pete for producing such wonderful utilities for our Flight Simulation experiences. We'd be in the dark ages without you.

### Usage Rights (EULA) ©©

This entire package is protected under the Creative Commons Attribution 3.0 unported license. What does that mean? Essentially, this license lets others distribute, remix, tweak, and build upon this work, even commercially, as long as you credit me for the original creation. This is the most accommodating of licenses offered, in terms of what others can do with my works licensed under Attribution. If you'd like to make changes to this guide, shoot me an email and asking for the original file it was compiled yourself and go for it! Just be sure to credit me for my work, that's all.



**Mark R. McCoy**  
Aviation Nut (nerd)  
markrmccoy (at) gmail (dot) com

