



Solaris Air is a fictional Virtual Airline and is not intended to be affiliated with any real world airline. Any information found within this document is for Flight Simulation use only.

This is the operations handbook for Solaris Air VA pilots. Inside this document you will find information regarding our day to day operations and what is expected of our pilots.

The VA's website is listed below in red. The website has company news, flight operations, downloadable liveries for our fleet of aircraft and more! All pilot's are required to use this website! Bookmark it!

This document is subject to change at any time without notice. This document is NOT to be used for real world aviation or navigation.

Our handbook does not supercede, or exempt any member from any other EULA, CoC, or Regulatory guidance for any necessary software that will/can be used (i.e. vaBase / client software / forums, the VATSIM Network, xPilot / vPilot, etc.) nor any local / regional / international Laws.

**[WWW.SOLARISVA.ORG](http://WWW.SOLARISVA.ORG)**



# -WELCOME ABOARD-

Welcome to Solaris Air! We are delighted you have chosen us for your Virtual Airline (VA). Whether you are new to flight simulation or have been in the hobby for decades we welcome pilots of all skill levels. We have a little bit of something for everyone here. Our airline is split into multiple divisions that cater to different aircraft and flying needs. We'll explain more about the divisions later in this document. For now, we just want to let you know what we are all about; FUN & FLYING!

That being said we do have some rules and pilot expectations we need to get out of the way before we move on to the next section. While we believe we aren't overly strict we do have some quality standards we want to maintain. Additional requirements for being hired for the VA are listed later in this document.



**1) FLIGHT EXPECTATIONS:** All new pilots **MUST** fly their first flight within fourteen (14) days of being hired. After that, we expect at least one flight out of you every thirty (30) days. If you will be unable to commit to this once hired a leave of absence (LOA) can be requested. Pilots will be exempt from the 30-day rule for the duration of the LOA. Any pilot fired from the VA for inactivity can rejoin when they can make the time commitment provided their status is in good standing with the VA.

**2) AIRFRAME KNOWLEDGE:** You are expected to know how to fly the aircraft you are wanting to book a flight for. Please know how to fly the plane you are taking up. Practice offline until you understand how to operate the aircraft efficiently and safely. Practicing your landings in the active server could lead to damage to your service record with bad landings. Training can be given upon request.

**3) RESPECT YOUR FELLOW PILOTS:** Our pilots interact on Discord a lot and you are expected to conduct yourselves like grown adults. Disrupting channels with unnecessary argumentative spam for the sake of egging people on will not be tolerated. Be respectful of opinions.

**4) BOOK IT, FLY IT:** Typically, you should book a flight when you are ready to fly. After 24 hours the dispatch center will automatically unbook your flight and you will have to file new paperwork.

**5) CRASHING PLANES IS BAD:** Mistakes happen, simulators glitch out, and gremlins eat planes. Crashing aircraft due to lack of skill or pilot errors does affect your overall score and promotion prospects so be sure you know how to operate your aircraft. If you crash a plane due to pilot error or simulator problems, you should file an NTSB report from the HR Department menu. We review these and determine appropriate action.



# -VABASE-

Our Virtual Airline operates on the vaBase network. This highly customizable system has allowed us to build the software around the VA rather than the VA having to adapt to a predefined system like other management software. Please use your real name if possible when applying to the airline. If you absolutely refuse to do so please use a realistic name at least. No names of famous people should be used. Make sure you properly capitalize the name. Failure to follow this naming scheme will get your application to be a pilot rejected!

## XPUIPC/FSUIPC/SIMCONNECT

In order for our ACARS software to track your aircraft's position and other vital statistics you must be using the XPUIPC (if on XPlane) or FSUIPC (if on FSX/P3D) plugins. These plugins link the simulator to the ACARS so it can read your aircraft's data in real time and give you credit for the flight. Below are the links to the software. Be sure you get the correct version for your simulator.

XPUIPC vers 2.0.4.8 [http://fsacars.com/downloads/xpuipc/XPUIPC\\_2.0.4.8.zip](http://fsacars.com/downloads/xpuipc/XPUIPC_2.0.4.8.zip)

(Note: The newest version of XPUIPC is 2.0.5.9 but it has been known to cause problems with other plugins and aircraft so we recommend 2.0.4.8 instead.)

FSUIPC version 6.0+ <https://www.schiratti.com/dowson.html>

SIMConnect is required for the new Microsoft Flight Simulator 2020. The good news is it already installed itself when you installed the simulator! You are good to go right out of the box.

A tutorial on how to operate in the VA's website and the ACARS client for a full flight can be located at the back of this handbook starting on page 9. There is also training videos on the company website. Follow the tutorials for problem free (mostly) flying with the VA!



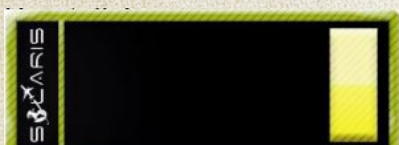


# -OFFICERS AND RANK-

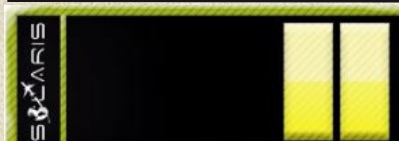
The following members are the current officer corp of the VA:

**Brian Navy** Chief Executive Officer  
**Will Dolezal** Chief Operations Officer  
**Lance Loomis** Assistant Chief Operations Officer  
**Justin Dupree** Fleet Operations Manager  
**Randy Nielson** Dispatch Operations Manager

As we grow officer positions may open. If we think you can handle it and show interest, we will talk it over. Please do not hound us on becoming an officer. We know you want to help but too many roosters in the hen house create problems. Below is our pilot rank structure with the hours and flight experience points required to achieve the rank. Hours are accrued by... you guessed it, FLYING! We fly one to one scale, no time acceleration allowed, even for long hauls. Your performance during the flight is tracked and evaluated upon landing. Based on your percentage score you will earn that many flight experience points. Every flight has the potential to earn you 100 XP. When you hit the hour and XP mark the system will automatically promote you to the next rank.



**TRAINEE - O0** - All new pilots start as cadets. You start with no hours and no flight experience and only \$500 in your pilot wallet which is enough to allow you jump seat twice.



**2ND Officer - O1** - 25 Flight Hours // 625 Flight XP required. The training wheels are off and your butt will be warming the right seat for many flights to come.



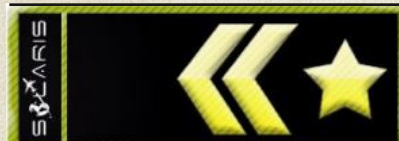
**1ST Officer - O2** - 100 Flight Hours // 2500 Flight XP required. Your eyes are starting to fix on that left seat goal and the next bar on your shoulder.



**CAPTAIN - O3** - 250 Flight Hours // 6250 Flight XP required. You made it to the Four Bar Superstar Club and are now warming the left seat on every flight.



**SENIOR CAPTAIN - O4** - 500 Flight Hours // 12500 Flight XP required. You walk down the jetway to your plan with your head held high knowing you have reached the first of the elite ranks.



**EXECUTIVE CAPTAIN - O5** - 1000 Flight Hours // 25000 Flight XP required. The flight attendants swoon as you pass by, your 401k is on the rise!



**SENIOR EXECUTIVE CAPTAIN - O6** - 2000 Flight Hours // 50000 Flight XP required. You have a fancy car at every home you own across the globe. That 401k is bursting with cash flow!



**CHIEF PILOT - O7** - 4000 Flight Hours // 100000 Flight XP required. You are revered as a god among your fellow pilots. You might as well go get a real pilot's license at this point and do it for real!

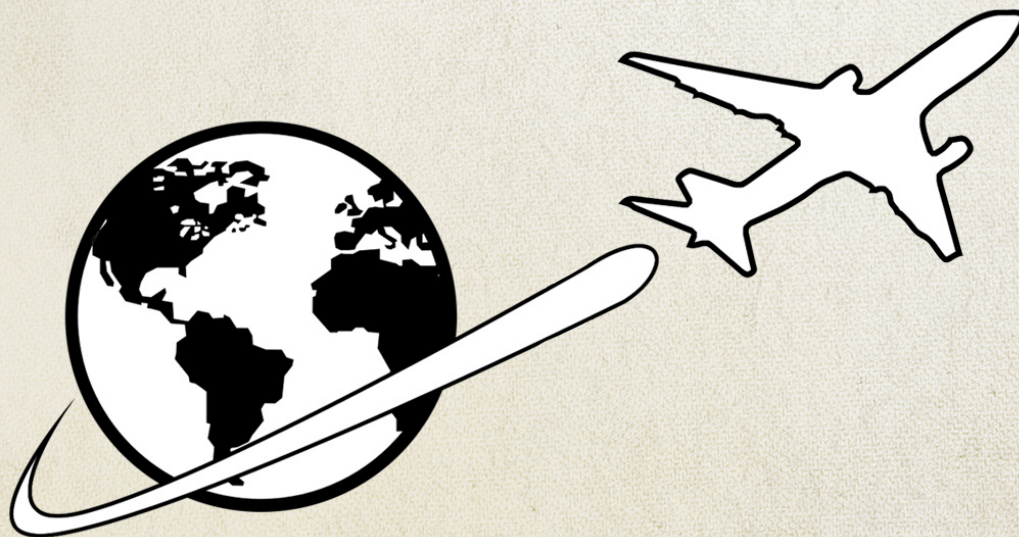


# -CODE OF CONDUCT-

In order to maximize the overall experience for everyone involved, Solaris Air follows a strict Code of Conduct policy. Violations of this policy can result in disciplinary action taken against the offender up to and including termination from the airline and all services linked to the airline such as the Discord server. The officers reserve the right to refuse participation for anyone for any reason and at any time.

The code of conduct is a general guide of behavior for individuals participating in any services offered by the airline (including vabase, forums, Vatsim/IVAO/Pilot's Edge and the Discord server). Any official communications regarding the airline or if you are actively representing the airline in other services fall under these codes as well.

- Every member of Solaris Air must abide by the rules and regulations of any platform while representing the organization.
- Respect is a very crucial concept to understand with organizations that foster learning and are home to a diverse group of members such as ours. Solaris Air emphasizes that all members should respect one another, the organization, and the hobby in general.
- All members are expected to follow the laws and regulations of their residence, as well as the location where they are accessing Solaris Air services from.
- Solaris Air encourages the exchange of information and expression so long as it is legally obtained and shared. We respect one's freedom of speech, however, we expect individuals not to use it disrespectfully or destructively. Free speech comes with consequences if abused.
- As we are home to a diverse group of individuals, discrimination based on sex, race, religion or simulator used (yep, had to throw that one out there) is not allowed. Derogatory terms are also not welcome and will not be tolerated. We have no place for harassment and discrimination, period.
- As a member of Solaris Air, you are not to use our services for the advancement of any illegal activities. Our organization cooperates with any law enforcement agency conducting investigations on members (current or inactive).
- Any form of multimedia that is considered graphic in nature is not welcomed on any service Solaris Air uses to conduct business.





# -HIRING REQUIREMENTS-

Solaris Air welcomes a wide ranging group of pilots as stated at the beginning of this document. We touched on the major requirements to be hired already but this section will lay out a few more requirements we have for new pilots to join along with emphasizing the previous stated rules. Anyone applying to become a pilot for the airline automatically agrees to abide by any of our policies and regulations as well as our Standard Operating Procedures laid out in this handbook.

Our basic hiring requirements are as follows:

- ALL NEW APPLICANTS MUST USE A REALISTIC FIRST AND LAST NAME, PROPERLY CAPITALIZED. WE PREFER YOU USE YOUR REAL NAME BUT FOR INTERNET SECURITY REASONS WE UNDERSTAND IF YOU DON'T WANT TO.
- ALL MEMBERS MUST OWN A LEGAL COPY OF MICROSOFT FSX, MICROSOFT FLIGHT SIMULATOR 2020, LOCKHEED MARTIN'S PREPAR3D OR LAMINAR'S XPLANE 11 OR 12.
- ALL MEMBERS MUST BE AT LEAST 13 YEARS OF AGE AND AGREE TO ABIDE BY ALL LAWS AND REGULATIONS THAT LIMIT OR CONCERN ONLINE ACTIVITY.
- ALL MEMBERS MUST MAINTAIN A VALID EMAIL ADDRESS ON FILE WITH THE AIRLINE AT ALL TIMES.
- ALL MEMBERS MUST HAVE ACCESS TO A STABLE INTERNET CONNECTION.
- ALL MEMBERS MUST BE WILLING TO DOWNLOAD AND USE THE VABASE ACARS CLIENT AND NECESSARY PLUGINS.
- ALL MEMBERS MUST BE ABLE TO ABIDE BY OUR ACTIVITY POLICY; FIRST FLIGHT WITHIN FOURTEEN (14) DAYS OF BEING HIRED AND AT LEAST ONE FLIGHT PER 30 DAYS THEREAFTER.
- ALL MEMBERS ARE REQUIRED TO INSTALL DISCORD AND JOIN OUR SERVER COMMUNITY. WE USE DISCORD AS A PRIMARY MESSAGE AND INFORMATION DELIVERY PLATFORM. YOU CAN SHARE FLIGHT PHOTOS AND GET TECHNICAL SUPPORT THERE AND MAKE NEW FLIGHT SIM FRIENDS.
- ALL MEMBERS SHOULD HAVE AN UNDERSTANDING OF AVIATION BASICS AND KNOW HOW TO OPERATE THE AIRCRAFT THEY ARE WANTING TO FLY. TRAIN OFFLINE! IF YOU NEED TRAINING USE OUR DISCORD TO ASK YOUR FELLOW PILOTS FOR HELP.





# -COMMUNITY COMMUNICATIONS-

## YOU MUST JOIN OUR DISCORD TO BE FULLY HIRED INTO THE AIRLINE.

In order to maintain communication with our pilots we use primarily our Discord server. There are a group of channels on the server used for Solaris Air operations. Company News, General Chat, Screenshots, and NTSB reports can all be found in the Solaris Air category. You can join our Discord easily by clicking the link provided below. Please note that due to spammers and some bad apples in the past cellphone verification has been turned on for the Discord server. You must have a valid cellphone filed with Discord and you must be in good standing with the Discord global community.



<https://discord.gg/JdwM66nXX3>

Once you sign into our Discord for the first time there is a 5 minute waiting period before you will be allowed to start using our channels. Once you have been approved go to the Solaris Air channel category on the left menu and find the **VA-PILOTAUTHENTICATION** channel. Post a checkin message into this channel with your pilot name you used to sign up for the airline. Once you are approved your SOA ID will be added to your Discord name like so; **Captain Kman | SOA101**

## VARIOUS MAIL DELIVERY SERVICES

We use Discord to push NOTAMS and talk to pilots frequently but we also use the built in mail system on the website to inform pilots of promotions, violations of policy and other news that is relevant to that pilot. When you see a new message alert appear on your website dashboard be sure to check it. Most likely there is something that needs to be known or addressed by you.

## SOLARISVA.ORG

Our company website is a place to also read up on the latest information regarding our airline. We post NOTAMS about new airport routes, new aircraft being added to the fleet, Vatsim Events, NTSB Crash Investigation report overviews and more! Be sure you bookmark the company website and check it frequently!





# **-FLEET DIVISIONS-**

Solaris Air is the operating entity under which we fly. Our VA has been organized into fleets of aircraft. Each fleet has its own routes and purpose which are defined below. You may fly in any fleet you wish and switch between them as needed for your flight enjoyment. Note that our callsigns SOLARIS, SUNGOD and SUNFLARE are registered names on the Pilot's Edge network so you can use these in your flights there. However on Vatsim we only use SOLARIS as our callsign regardless of which division we are flying for. Vatsim only allows one callsign per VA.

## SOLARIS AIR ICAO: SLR CALLSIGN: SOLARIS

This is our main commercial PAX division which is based in the United States and provides domestic services to the US, Mexico, Canada and the Carribeans.

HUBS: KSEA, KLAX, KPHX, KDEN, KDFW, KORD, KATL, KMIA, KDCA, KJFK

AIRCRAFT FLEET TYPES: 73x, A31x, A32x, B75x, B76x, MD8x

## SOLARIS EURO ICAO: SEU CALLSIGN: SOLARIS EURO

This is our European domestic sister company providing routes all across UK, Europe and the Middle East.

HUBS: EGLL, EGCC, LEMD, EDDF, EDDB, LIRF, LFPG, LSZH, EPWA

AIRCRAFT FLEET TYPES: A31x, A32x, B73x, B75x, E175x, E19x

## SOLARIS REGIONAL ICAO: SOF CALLSIGN: SUNFLARE

This is our US based regional fleet which provides similar routing as the main PAX division but with smaller regional planes.

HUBS: KSEA, KLAX, KPHX, KDEN, KDFW, KORD, KATL, KMIA, KDCA, KJFK

AIRCRAFT FLEET TYPES: CRJx, E14x, E17x, E19x, SF340Ae (mostly) flying with the VA!

## SOLARIS CARGO ICAO: SLC CALLSIGN: SUNGOD

This is our cargo fleet which operates domestic US cargo routes as well as world spanning international cargo long hauls.

HUBS: KMEM, KDFW, KSDF, KLAX, KSEA, KJFK, KMIA

AIRCRAFT FLEET TYPES: B727Q, B763F, B77L, B748F, B757F, A300F

## SOLARIS CORPJET ICAO: SOB CALLSIGN: SUNBEAM

This is our charter business service. We only offer this service currently in the United States. Routes are chartered on a daily basis or as new clients call in for our service.

HUBS: KDAL, KSEA, KMDW, KTEB, KMGM, KMIA

AIRCRAFT FLEET TYPES: B350, C550, CL30, C700, E50P, FA50EX

## SOLARIS SKYHOPPER ICAO: SOS CALLSIGN: COMET

This is our US based regional fleet which provides similar routing as the main PAX division but with smaller regional planes.

HUBS: TJSJ, NZAA, PHNL, FSIA, TNCM

AIRCRAFT FLEET TYPES: B190, B350, C208, DHC6, KODI, PC6, SF34



# -MY FIRST FLIGHT-

So you have signed up and been hired. You can now fly your first flight but where to begin? This section will take you through the basics of getting a flight prepared, started and finished for Solaris Air.

## BOOKING A FLIGHT

Booking your first flight is relatively straightforward. Go to SOLARISVA.ORG and click on the Flight Operations menu option to head to the FlightOps Center. Once there click on the Crew Center main menu option and sign in to your pilot account. Once your pilot dashboard appears you will take note of where your pilot is currently located in the virtual world. Our VA software tracks where your pilot is at all times, and it is persistent. If you land at KDFW your pilot persona will be at KDFW. You can only book flights from the current

Hello, Brian.

Your Pilot ID: SOA001  Senior Executive Captain

Base: Dallas/Ft. Worth

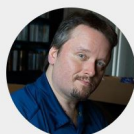
Total Hours: 2756:55 | XP: 116,419

Wallet Balance: \$7,253,316.00

Best Landing: -97pm on 23 Nov 2022 at 9 KBWI

Virtual Location: KCLE

Jump Seat



## Advanced Schedule

Use the filters below to search all flight schedules. Alternatively, you can search for flights on the route map.

Flight Number:  Departure ICAO:  Arrival ICAO:  Aircraft:  Operator:  Virtual Location:

### Flight Schedule

Show 50 entries Search:

Flight Number	Departure ICAO	Arrival ICAO	Depart UTC	Arrive UTC	Duration	Operator	Aircraft
SOA1029 (1)	KCLE	KATL	19:00:00	20:50:00	01:50:00	Solaris Air	B737, B738, B38M, B752, A310, A319, A320, A321, A321XLR, MD88, A332, A346, A359, B748, B763, B77W, B787

### SOA1029 (2) Flight Information

Flight Number	SOA1029 (2)	Duration Approx.	01:45:00
Departure ICAO	KCLE	Day	Su
Departure City	Cleveland	Aircraft	A320
Departure Time	15:45:00	Aircraft Reg	N559SL
Arrival ICAO	KATL	Operator	Solaris Air
Arrival City	Atlanta	Comments	Callsign on Vatsim is SOLARIS. Add to your Vatsim Remarks section so they don't call you Southern Air.
Arrival Time	17:30:00		

airport you are at. If you want to fly out of a different airport you must catch a ride in a jump seat to the airport you want to fly out of. If you want to move airports click on the Jumpseat button next to your virtual location display. On the menu that pops up, type in the ICAO of the airport you want to move to, pay the \$250 jump fee, and close the Jump Seat window. You will note your pilot's virtual location has changed to the airport you typed in.

Once you are at the airport you want to fly out of, go to your name in the top menu bar to open the drop-down menu and click on Dispatch. You will be presented with the dispatch screen. There are two types of flights you can create; a scheduled flight (preferred) and a charter flight (when a suitable route is

not listed for you). For our first flight, we will create a scheduled flight filing. Click on Find Route. After a few seconds, the database of routes will load, and you can filter them by filling in the filter data as desired. Filter by the airport you are currently at. This will present to you all the departures out of this airport. If more than one division has routes out of this airport filter the available routes further

✓ You have successfully booked this flight. Please visit the [Dispatch Center](#) for a flight briefing.



**SOLARIS** Operations Center About Us Brian Navy Admin

You can dispatch this flight via SimBrief instead.

**Dispatch via SimBrief** Cancel Flight

SOA1029 (2) OFP Summary (02-12-2022)

Flight No	Aircraft	Depart	Arrive	Depart Time	Arrive Time
SOA1029 (2)	A320 (N559SL)	KCLE	KATL	15:45:00	17:30:00
Air Time	PAX	Cargo	Crew	Distance approx.	PIC
01:45:00	71	20374lb	5	639.1nm	Brian Navy
MZFW	MTOW	MLW			
62500 kg	78000 kg	66000 kg			
Routing					
N/A					
Remarks					
Callsign on Vatsim is SOLARIS. Add to your Vatsim Remarks section so they don't call you Southern Air.					

by choosing which division you wish to fly for.

Once you find the flight you want to take simply click on the flight number from the presented list. You will be taken to the preliminary dispatch screen. Choose which airframe you want to use for the flight from the Aircraft drop-down menu then click the Dispatch button. After a few seconds,

you will get a message at the top of your screen saying the flight is booked and ready for dispatch. Click the green Dispatch Center button and you will be taken to the final booking screen. Choose how much extra fuel you want then click the Dispatch from Simbrief button. A window will pop up to log you into your Simbrief account and file your paperwork. Once it is done you will be presented with your flight briefing screen. From here you

SimBrief Dispatch

Leave fields that are not required blank to be auto-generated by SimBrief.

Flight Plan

Aircraft ICAO\*: A320

Aircraft Reg: N559SL

Flight Number\*: SOA1029 (2)

Origin\*: KCLE

Destination\*: KATL

PAX: 71

Cargo (lb): 20374

Route:

Reserve Fuel\*: 45 MIN

Overrides

Departure RWY:

Arrival RWY:

**Dispatch Flight**

can pre-file on any of the online networks and print out your paperwork into a PDF file. You are now ready to start the simulator, load in, start the ACARS software, and get ready to rock.

« Edit flight plan

OFP Summary

Flight No	Aircraft	Depart	Arrive	Alternate	Initial Alt
SOA10292	A320	KCLE/24L	KATL/08L	KBNA	35000
Depart	Air Time	Block Fuel	Extra Fuel	ZFW	TOW
13:52 UTC	20:21	20008lbs	20 min	133891lbs	153645
Cargo	Distance	AIRAC	Format	Units	
24948lbs	547nm	2212	SWA	LBS	
Routing					
CAVV54 APE DCT HVQ DCT HLRRY ONDRE1					
DX Remarks					
PAYLOAD/CARGO LIMITED BY MLW					

Actions

Download PDF

Pre-file on Vatsim

Pre-file on Ivaq

Pre-file on Pilot Edge

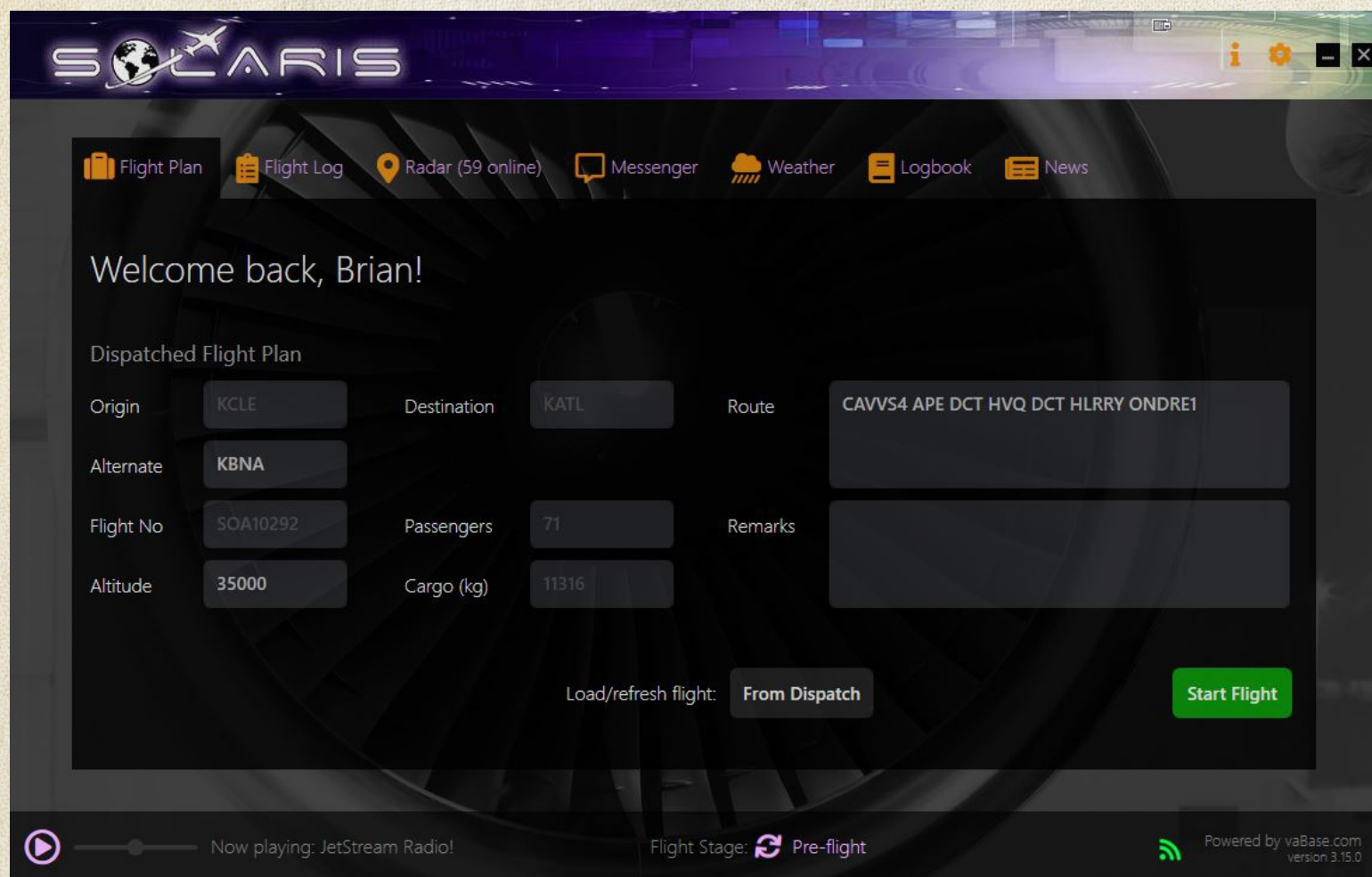
Pre-file on Poscon

Delete Flight

## FLY!

You are ready to fly your first flight! Load into the simulator and once you spawn in at the gate you can start the vaBase ACARS software. I highly recommend pinning this to your taskbar so it doesn't get lost in desktop clutter. Sign into your account and you will be presented with the Flight Plan tab. Make sure all the data looks right. If it is, go to your aircraft's fueling panel and fuel up. Once you have loaded the fuel onto your aircraft click on the green Start Flight button and away you go. It will warn you about making sure your fuel tanks have been filled before proceeding just in case you forget. Once a flight begins you cannot change the fuel onboard. It will invalidate your flight and you will have to start it over. We'll go over the ACARS interface now.





Above is our new custom ACARS software for tracking all our flights. Apart from tracking flights the ACARS has other useful functions which are arranged as tabs across the top of the interface.

**Flight Plan** – This is the default starting tab and should show your dispatched flight from the website. If you did not file a flight plan it will be blank. While you can file a flight plan directly from the ACARS this is not recommended as the ACARS cannot interface with Discord like the website does so vital information won't be passed on. As such, please refrain from filing a flight directly from the ACARS software. Always do your flight planning on the website at the Dispatch Center.

**Flight Log** – The flight log tab shows the blackbox data recorder real-time data from your aircraft. Every time you start an engine, move the flaps, move the spoilers, take off, land, or hit cruise it will appear here in the log. The last thing your log will show is when you set the parking brake and turn off the engines. It will say you are parked at the airport. At this point, you can go back to the Flight Plan tab and click the End Flight button to have your ACARS data sent back to the home office for completion and addition to your pilot's log.

**Radar** – The Radar Tab shows you a map of the Earth and all currently active flights by



every airline on the network. You can click any plane's icon to get information on that flight.

**Messenger** – The Messenger tab allows you to chat with all the pilots currently on the network. Remember you represent the airline so conduct yourself in a civil manner. Don't discuss the usual no-no's on the messenger network.

**Weather** – The Weather tab will show you your departure and arrival airport's current METAR data. You can also type in any METAR station to get current information from the station.

**Logbook** – The Logbook tab shows all your past flights, and you load them to look at past information regarding each flight.

**News** – The News tab shows a real-time list of simulation news from FS Elite's website.

In the lower-left corner are the JetStream radio play button and volume control. JetStream Radio is a radio station run by aviation and simulation enthusiasts and is quite professionally operated. Their music is good, and you can go to their website and put in music requests to listen to when you are at cruise for the next 5 hours.





# -BEST PRACTICES-

We want all our pilots to make the best performance score they can on each and every flight. To this end, here are some helpful tips and best practices when doing a flight for the VA.

## **Let There Be Lights... Or Not**

Our ACARS software checks to see what the configuration of your aircraft's lights is. If you fail to turn these off and on at the right time, you'll get dinged on your performance score. In order to avoid losing points it is advisable to turn on your Red Beacon Navigation light BEFORE you call your tug to the plane to hook up and push you. When you pull up to the gate at the end of your flight, turn off the engines and set the parking brake and wait at least 10 seconds before switching your Red Beacon Light off.

Your landing lights go on just before you make entry onto the runway for takeoff and go off right after you hit 10k feet. This measurement is in AGL and has a small window of opportunity to be completed or you will get dinged for lights on above 10k. The reverse is true when coming down to land. Lights on as you hit 10k and they don't go off until you exit the runway.

## **Avoiding Speeding Tickets**

Just like there are speed limits on our highways, the same applies to aircraft on the ground and in the air. While on the ground, no pilot should exceed 20 knots indicated ground speed. The max limit is 25 but for safety reasons and to avoid erroneous speed violations use 20 knots while on the ground moving.

Speeding below 10k is strictly prohibited in our airline and the ACARS software is very quick to nail you for this violation. When approaching the 10k mark it is best practice to put the aircraft into Level Change mode and set your speed to 240 knots. Slight speed braking while crossing 10k can also help control the aircraft's speed on the way down. For MSFS2020 fliers, the current weather engine has issues with its winds and you can quickly find yourself in trouble with speed. Once you are clearly below 10k you can pull in the brakes and continue down at your leisure but keep an eye on that speed.

## **Ouch My Back (Or how NOT to land like a maniac)**

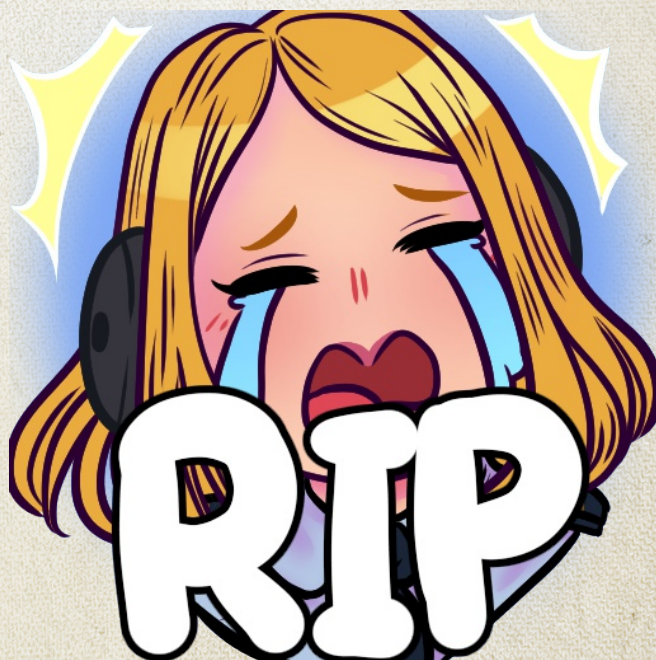
We have a high standard set for landing rates. We want our landings to be below 250 fpm. Landing at this rate is considered perfect and no performance points are lost. If you land higher than 250 you will incur a 10% penalty. These numbers are set. Don't ask for them to be expanded instead practice getting your numbers into the green.



# -ACARS SCORING-

Your performance score starts at 100%. Errors during your flight will reduce this total by the amount listed below.

Landing Rate Lower Than -250 FPM.....	0%
Crash Detected.....	-100%
Landing Lights on Above 10k.....	-5%
Landing Lights not on Below 10k.....	-5%
Aircraft Overspeed Detected.....	-30%
Slew Detected.....	-50%
Taxi Overspeed Detected.....	-5%
Overspeed Below 10k.....	-5%
Beacon Off but Engine On.....	-7%
Aircraft Stall Detected.....	-50%





# -FAQS-

**CAN I PAUSE THE SIMULATOR?** Yes. If you have to step away from the PC you can pause and resume the flight later.

**CAN I USE TIME ACCELERATION?** No. We turned off time acceleration as it can be used as an exploit to gain pilot hours for ranking up. This forces all pilots, long haul or short haulers onto the same playing field. If you turn on time acceleration the flight will automatically be voided.

**I CRASHED A PLANE... WHAT DO I DO NOW?**

File an NTSB report from the company website and let us know you have done so in the NTSB channel on Discord. You can find the report under the Human Resources menu. We need to know what happened. Was it a glitch? Did a certain plane screw up? Do you need more practice? These reports help us send out NOTAMS about the performance of certain aircraft and other software in the simulation environment. Be careful not to crash a plane due to pilot error. That goes into your logbook, and you will lose Flight XP which is required for promotion.



**I WON'T BE ABLE TO FLY FOR A WHILE.**

**WHAT DO I DO?** File a Leave of Absence request by sending a direct message to any officer using the company website messaging system. You will be put into Leave status and protected from being booted from the airline for failing to make your monthly flight quota. Once you return to duty just send a message again saying you are ready to return to active duty and we'll get you ready to fly again.

**THE PLANE I FLY DOESN'T HAVE A SOLARIS LIVERY. CAN WE HAVE ONE?** Yes, provided a livery painter is available. We have many different aircraft in our fleet, and it is our intention to have at least one Solaris livery for each aircraft type. Just let us know in the #livery-central channel on Discord what you are looking for and we'll put it on the TODO list. CAN I

**SUBSTITUTE THIS AIRFRAME FOR THAT AIRFRAME?** You can only sub if the airframe you are subbing out is in the same family of aircraft. So if you want to fly a 787-900 flight but you only have -1000 model you can sub that. You cannot sub a CRJ for an ERJ, Airbus for Boeing, etc.



# -COST INDEXES-

These are our current Cost Indexes that are based loosely on real world airlines and/or recommended CI from the aircraft manufacturer. This is your typical CI and can be adjusted by the pilot as needed for wind conditions and for making up lost time if behind schedule. Typically if you are behind schedule or are fighting head winds for a large portion of the flight you will want to raise your CI 30/50 extra points above the standard. Likewise, if you are way ahead of schedule or experiencing significant tailwinds you can lower the CI rating by 5/15 points on average to squeeze out some minor fuel savings. Remember, the higher the CI the more fuel the plane will use to achieve higher values in the FMC. Lower numbers conserves fuel.

AIRBUS		BOEING		BOMBARDIER		McDONNELL DOUGHLAS	
A300F	CI=60	B727Q	CI=28	CRJ2	CI=9	MD88	CI=24
A319	CI=20	B73x	CI=36	CRJ7	CI=9		
A320	CI=23	B748I	CI=70				
A321	CI=25	B748F	CI=72				
A332	CI=35	B752	CI=75				
A359	CI=30	B752F	CI=85				
		B753	CI=75				
		B763	CI=60				
		B763F	CI=70				
		B777W	CI=85				
		B777L	CI=80				
		B789	CI=25				





## SCHEDULES FLIGHTS

We currently have a vast scheduled network of flights, slightly over 10k routes. This is the official route network of our airline and the different divisions. This is the preferred method of dispatching a flight. If you don't find a route to your liking, you can utilize the charter flight system

You can find scheduled routes by either using the Dispatch Advanced Search function from your personal drop down menu or by going to the operations menu and clicking on the Route Map and finding an airport to search for routes to and from that airport.

## CHARTERED FLIGHTS

Charter flights allow you to break free of the scheduled routes system and fly what you want, where you want. Whenever possible we prefer you to use the scheduled routes system as this is our airline's official route network used globally but when it's time to go off-road the charter flight dispatch system is there for you to use.

When you charter a flight, in the planning screen, be sure to use this format for your Flight #: SLR/SEU/SLC/SOB (depending on which division you are flying for) + Your SLR ID # + the letter C. So if I were doing a chartered cargo run and my ID # is SLR001, my filed flight number would be; SLC1C. You can drop the zeroes in your ID #. They are not necessary.

Select a location on the map to view flights to and from the airport. You can select the airport by clicking on your location below, or by searching for an ICAO. Alternatively, you can use the **advanced schedule** search.

📍 View flights from your current location: [↗](#) MDSD

ICAO

Find





# -FLIGHT OPERATIONS-

You will be spending most of your time in the Flight Operations Center (FOC) on the website. From here you can dispatch flights, look at your logbook, check messages, NOTAMS, get information regarding our airline HUBS and fleets as well as browse all of our schedules, and more. This section of the handbook will discuss briefly each of the menu options and what you can do for each menu option

## OPERATIONS CENTER MENU

The operations center menu has options for viewing Tours and Events, our company Route Map, Schedules, HUB base information, Fleet information, and the Live Flights map.

**Tours/Events** – Anytime we sponsor Tours and Vatsim events you can read about them in this section. All tours and events will always be broadcast to the #dispatch-center channel via NOTAM when they are created and ready for signups.

**Route Map** – The route map page shows a map of the Earth with red ICAO pins stuck in every airport we have a route to. You can click on these airport pins to see the destinations for the selected airport. You can also type in the ICAO address of an airport in the airport finder search box.

**Schedules** – The schedules menu option takes you to the advanced schedule page which is the same page you use when you dispatch a flight. You can search for routes via filters to find the flight you are interested in making.

**Base (Login Required)** – The bases menu shows all our hubs. You can click on each hub to learn information about that HUB. You learn about the airport, what facilities we have there, how many pilots call that HUB home, and all the flights that have been done out of that HUB for the last 30 days. The button at the bottom of this menu allows you to get detailed data about this airport's runways, frequencies, current weather, and NOTAMS.

**Fleet** – The fleet menu shows all the aircraft we use in each division. You can click on the graphic icon to get detailed information about that aircraft type.

**Live Flights** – The live flights menu shows all the active Solaris flights. You can click on





any plane icon to get information about that flight in progress.

### ABOUT US MENU

The About Us Menu has information regarding our airline. This includes a bit of history, statistics, our duty roster, our staff contact information, rank structure, and the awards available in our awards program.

**Airline** – This is a little background history on our airline.

**Statistics** – The statistics menu gives real-time about our airline including flights flown, hours spent in the air, PAX and cargo movements, and who is on the leaderboard for best landings.

**Roster (Login Required)** – This is the roster menu showing all of our pilots. You can click on each pilot to get information about them.

**Staff/Contact** – This menu option shows a list of our current staff and a little information on each plus their VA e-mail address should you need to e-mail any of us for any reason.

**Rank Structure** – The rank structure menu shows all of our pilot ranks and how many hours and experience points are needed to advance up the ladder in the airline.

**Awards** – The awards menu shows a list of all our awards you can earn and how to earn them.

The Join menu option allows new applicants to apply to the airline.

### CREW CENTER MENU

The Crew Center menu is where all active pilots log in to the FOC to conduct their business. When you sign into your account the Join button will turn into your pilot name and become a new dropdown menu and you will be presented with your pilot Dashboard. From the pilot menu you can do the following:

**Dashboard** – This returns you to your Dashboard from any other menu.

**Dispatch** – This is where you dispatch your flights and file your flight paperwork.

**Manual PIREP** – If you have some kind of problem with the ACARS software that presents you with the inability to file your completed flight automatically you can file a manual PIREP. This should be considered a last resort. All flights should be logged through the ACARS automated system whenever possible.

**Logbook Map** – This shows you all the flights you have done on a world map.

**Logbook and History** – This is where all your past flight data is stored for you to look over at your leisure.



**Wallet** – This allows you to see your bank account and all your earnings and expenditures.

**My Profile** – This allows you to view your profile.

**My Awards** – This allows you to see all the awards in your employee records.

**Downloads** – The downloads menu allows you to download a copy of this manual and other odds and ends as needed.

**Edit Profile** – This allows you to edit your current profile.

**Inbox** – This is your message inbox where you can look at any internal company mail sent to you.

**Send Message** – This allows you to send an internal e-mail to other pilots or staff members.

**Change Password** – This allows you to change your password if you need to.

**Logout** – This logs you out of the FOC.





# -VATSIM-

With the new Vatsim Codec being amazing there has been a return to using Vatsim. Our airline is in partnership with Vatsim to provide excellent immersive services for all our flying needs. When you sign up to join our airline if you are a member of Vatsim please supply us with your Vatsim PID in the appropriate info box on your application. We are required to keep an active list of all our pilots that use the Vatsim network by their audit department in order to stay in compliance with being a partnered Virtual Airline.

All pilots who use the network are to conduct themselves in a professional manner. You are a representative of the airline always when using any online service with our callsign. If we receive any complaints from the Vatsim leadership about any of our pilots we will ground that pilot immediately pending our own investigation. If you are found to be in violation of Vatsim policies, you will be terminated from the airline. No exceptions. If you are going to fly online as a representative of the airline always conduct yourself professionally.

While we have several divisions that have their own unique callsigns Vatsim only allows Virtual Airlines to use a single callsign. As such when filing a flight plan for our VA always use the SLR identifier for the ICAO (EX: SLR5121). All flights regardless of division will use the SOLARIS callsign when making voice contact with controllers

When you file your flight plan be sure you put the following information in your remarks section of the flight plan: **SOLARIS AIR VA/SOLARISVA.ORG/ICAO-SLR/CALLSIGN-SOLARIS**. Failure to do so will probably have the controller calling you Southern Air since that little charter airline IRL uses the SOA ICAO identifier. This will let the controllers know you are part of a VA and what to call you correctly when they interact with you on voice comms.

If you are feeling unsure if you want to be on the Vatsim network, there are a series of training videos that can maybe help you get more comfortable with using the network before you get on it. AviationPro has a good training tutorial series to start with. You can find his tutorial playlist at the following URL:

[https://www.youtube.com/watch?v=u10JjIP6QfY&list=PLtO\\_n5SzuAadbW1hjV59Ebm6s9APfWsZM](https://www.youtube.com/watch?v=u10JjIP6QfY&list=PLtO_n5SzuAadbW1hjV59Ebm6s9APfWsZM)

Happy Vatsim flying pilots and we'll see you in the skies above the digital world!





# -JOINFS SETUP-

JoinFS is a great alternative to flying on Vatsim/IVAO/Poscon that we use for group flying when we just want to relax and not deal with ATC. JoinFS has an extremely high refresh rate the even allows for high-speed formation flying. You can grab a copy of JoinFS at the link below and it supports all major flight sims so we can all fly together regardless of sim:

<https://joinfs.net/>

Follow the instructions on the website for installation. Once it's installed, launch your sim and spawn into a gate and then start the JoinFS client. Once the client loads here are some simple instructions on setting up your first flight on JoinFS.

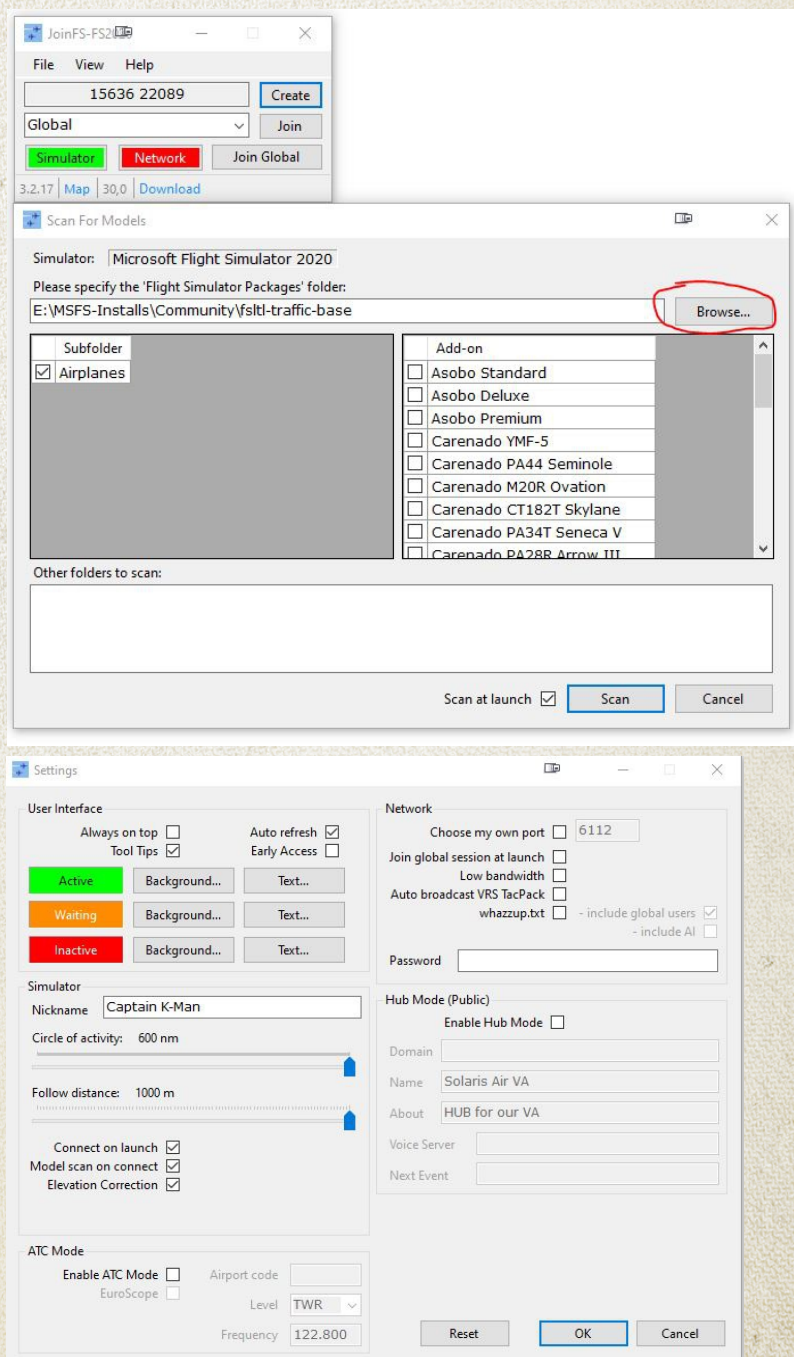
The main JoinFS is small and doesn't take up much space. The first thing to note is if your Simulator box is lit green. If it, JoinFS is successfully connected to the sim and ready for operation. The Network button should be red by default as you have not yet connected to a JoinFS server. If you need to disconnect JoinFS from the simulator for whatever reason just click on the green Simulator button. To quick connect to your previous server you joined just like the Network button. It should turn green to show you have connected.

## Scan For Models

First thing you need to do is scan for models which can only be done while the sim is running. Click on the File drop menu and select Scan For Models. On the selection screen that opens up, turn off all payware and freeware planes that show up in the list then click the browse button and point JoinFS to the folder holding your AI models. For MSFS users this can be AIG or FSLTL models. In this example, I am pointing to the FSLTL models in my community folder. Once it is done scanning it will tell you how many models it found.

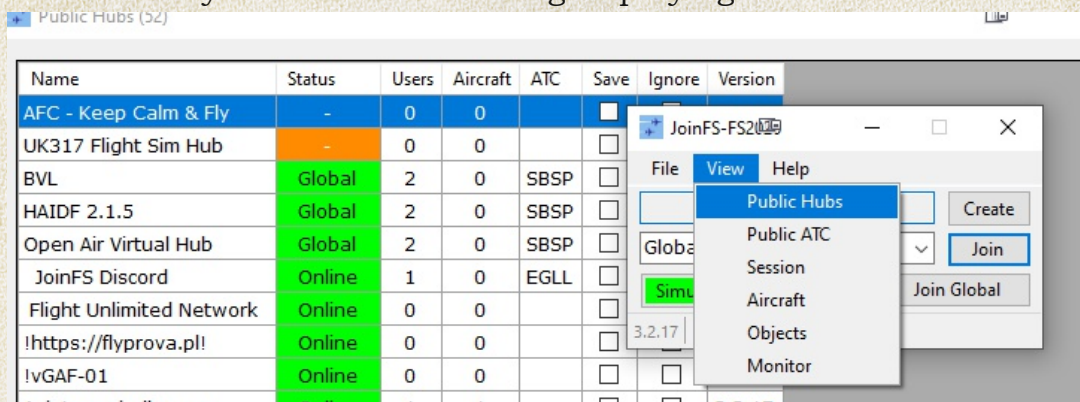
## Basic Settings

Next click on the File menu and select





Settings to bring up the settings screen. The way I have it setup in the screen shot to the right will typically work for everyone for basic JoinFS group flying.

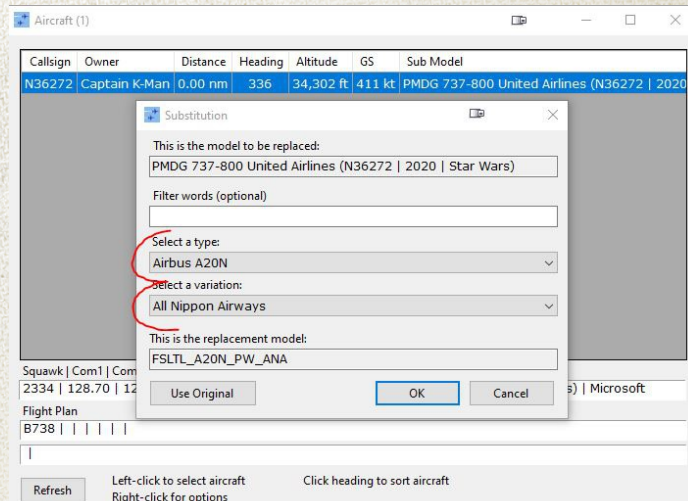
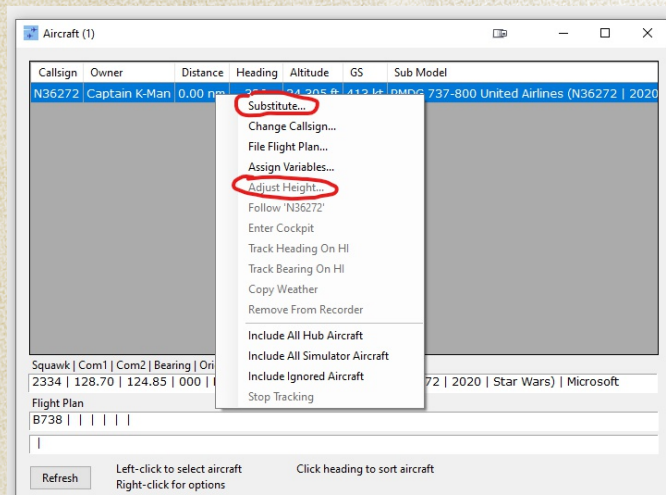


## Join a Server

You should be ready to join a server now. We use the Global server called Open Air Virtual Hub. To join the server, click on the View menu and click on Public Hubs. Find the Open Air Virtual Hub, right click on it and select Join. You will log into the hub and your Network button should turn green to show you are connected now to the server. You will show up to other players almost instantaneously.

## Aircraft Menu - Subbing Out Planes and Adjusting Heights

You have full control over what model plane and livery each pilot on the network looks like. You can set this up quickly by using the Aircraft menu. Click the View menu option and select Aircraft. This will show



you a list of all the other players that are near you and what model they currently are. To sub out a player's model right click on the their name and select the Substutue option. In the dialog box that opens change their plane type and pick a livery and click okay and they will change immediately to that new model and livery. If you find that the new model is bouncing up and down on the ground you right click on their name again and pick Adjust Height and change their height. We recommend between 50cm and 100cm height adjustment to make their plane stop bouncing. This information is saved for that player. Anytime that player flies with you in the future it will remember your settings.

Happy Group Flying!