®

AirHauler 2 Manual

Introduction

1 Introduction

Welcome aboard!

AirHauler 2 allows you to create and run a simulated airline, covering both passenger and cargo operations. You can open new bases at airports, purchase aircraft and hire pilots to grow your fleet.

AirHauler and AirHauler 2 were designed specifically to give structure to flight simulator sessions by given the player something meaningful to do, and also to get the pilot flying to new an interesting airports rather than shuttling between the same add-on scenery places.

AirHauler 2 expands the things to do in the AirHauler world by adding passenger flights, commodities, crafting and aircraft construction and also allows the player to create, or fly in a Virtual Airline to co-operate with other AirHauler 2 players.

Many thanks for purchasing AirHauler 2, and I hope that you'll enjoy it! Feedback and comments are always welcome at the AirHauler 2 forums. (http://ah2.justflight.com)

Anyway - lets get started!

1.1 Starting a New Game

To start a New AirHauler 2 game, launch AirHauler 2 and select "New Game" from the Choose Company Window.

Once you have one or more companies, you will be able to select between them using this window, but for now, we need to create a new company.

Clicking "New Game" will start the New Game Wizard.

Setting the Microsoft Flight Simulator Path

When the new game wizard loads, AH2 will automatically set the path to that of the MFS Packages directory. Note that MFS uses a complex, and usually hidden, folder structure and if AH2 can't identify the path itself, it will ask you to do so. In that case, AH2 requires the "Packages" folder which contains the Steam/OneStore directory and Community directory.
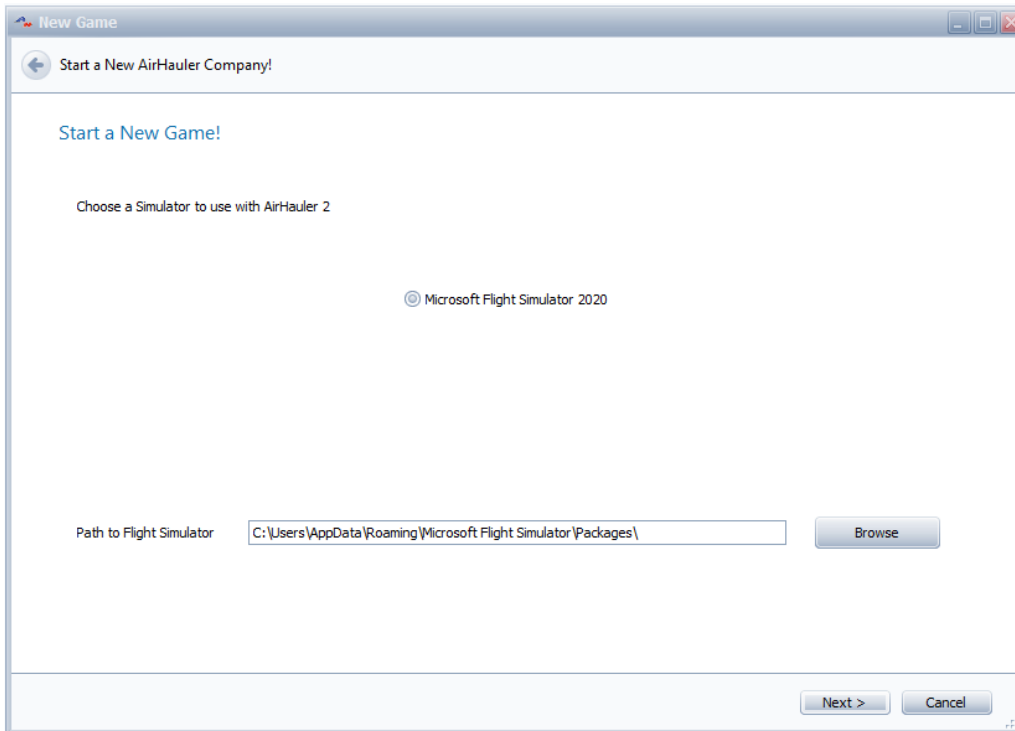
Entering your Company name and Details

On the next page of the wizard, enter your Company Name, Pilot Handle (which will be shown on the Radar screen etc), and your Full Name.
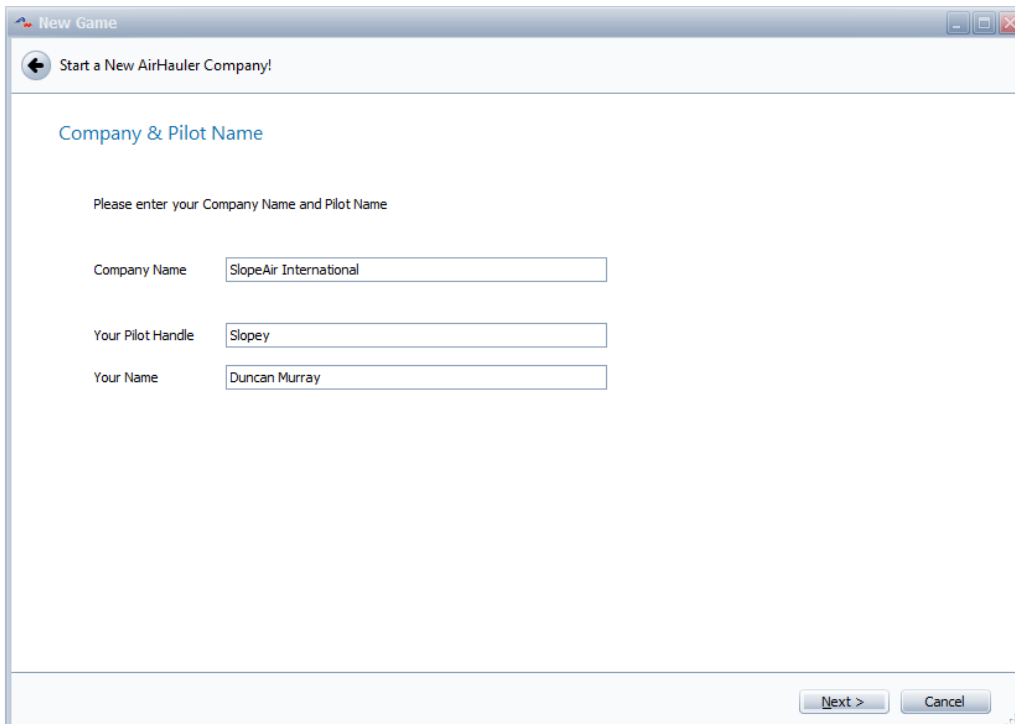
Press "Next > " to continue

Choose your Difficulty setting

On the next screen you can choose between various starting options, from ones with a large amount of up front money and an airliner, to a modest amount of money and a simple aircraft or right through to a nomadic existence with a single C152 and no bases.
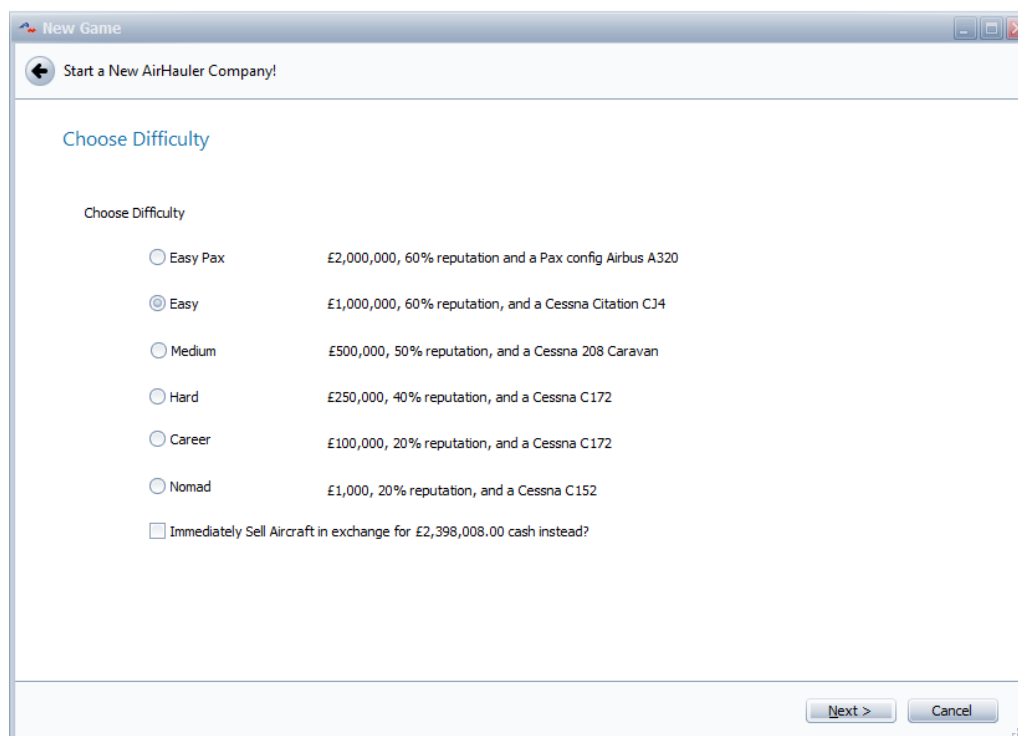
You can use your own aircraft within AirHauler 2 by importing them, and to do so, simply choose a starting scenario which best matches how you want to play, and then you can sell the initial aircraft and purchase an add-on aircraft once you're into the game proper. Alternatively, you have the option to sell the starter aircraft immediately for the full purchase price when starting a new game. You can then purchase any aircraft you can afford once your company has been created.

For more information on difficulty settings, see the chapter on <u>Game types/difficulty</u> [12].

Select a difficulty, and click "Next >"

Choose your Starting Base location

You must have at least one "Base" for your Company in AirHauler (think "FBO" for base). To select a base, click the "Choose Airport" button and use the filters on the Choose Airport screen to select a Base. Alternatively, you can select an airport (the red dots) directly from the Map in the lower half of the screen.

To zoom the map, use the mouse scroll wheel. To pan the map, left-click and drag, and to select an Airport, left click one of the Red Airport markers.
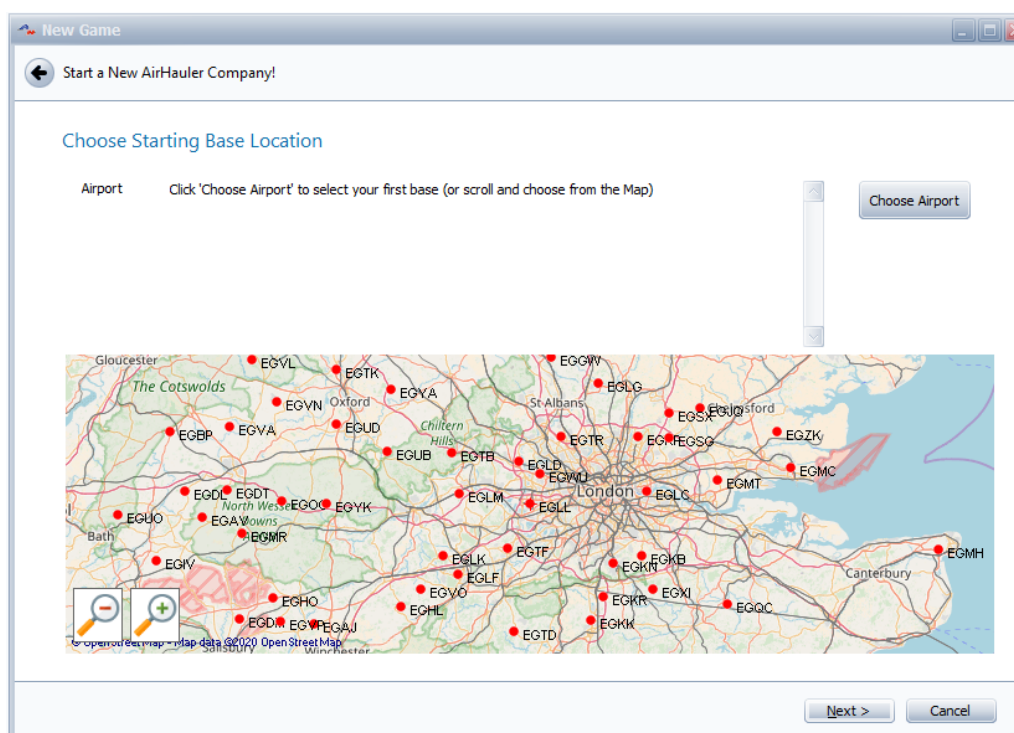
Once you have chosen a base, click "Next >"

Cargo Job Creation Options

You can also set the cargo job creation options for your new AirHauler company. You can adjust the volume of jobs, the sizes or airports the jobs will be scheduled to and from, the size of the jobs and their distance. Note however that this is not a hard set of settings - these options only *influence* job generation. You will still get jobs outwith of these criteria. Please see the topic on Job Creation Options 158 for more details.
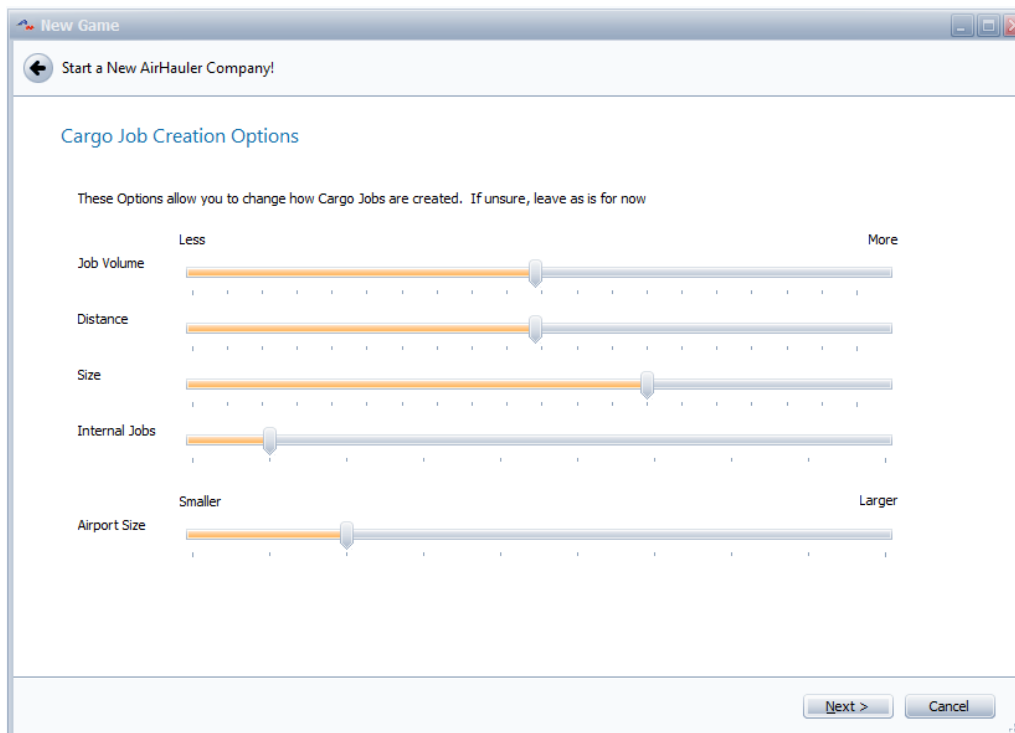
When you've selected your options, click "Next >"

Completing the Wizard

That's it! You're ready to start your company and take to the skies!

Click "Finish" to close the Wizard. AirHauler will then create your company, and populate some jobs for you to fly, aircraft for you to buy, and depending on your reputation or difficulty settings, crew for you to hire!

Enjoy, and Clear Skies!!

1.1.1   Game Types/Difficulty

AirHauler 2 features several starting scenarios, which allow you access to larger and more expensive aircraft as an easier option, or restrict you to smaller aircraft at the harder difficulty options.

When starting a new game, you can select the difficulty at that point. Note that this is a one time selection, and as it defines your starting criteria, cannot be modified later (with the exception of Nomad mode).
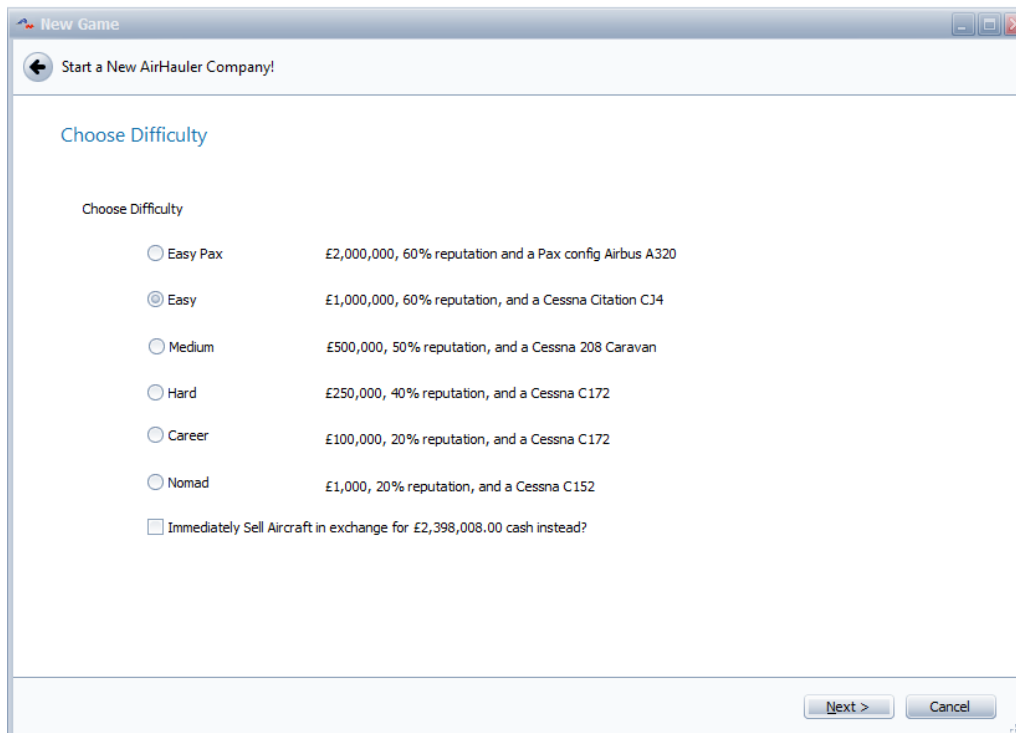
You can select between Easy, Medium, Hard or Career mode from the standard difficulty levels.

Career and Hard mode are the most difficult levels. You're provided with a light aircraft, and limited funds. You also have a low reputation value, which you'll need to increase before you can hire pilots or take out loans.

Medium and Easy offer a simpler starting setting, with a larger aircraft or light jet, and much more money. You also end up with much more reputation so you can start building out your fleet and pilot roster immediately.

The Easy Pax option is offered for those players who want to get straight into flying passengers in heavy metal, without building their company up through light aircraft and expansion.

If you'd rather start off with an aircraft of your choosing (for example, a 3rd party version of a C172 or similar), then you can opt to sell the provided aircraft immediately for the market rate, allowing you to purchase your own preferred aircraft as soon as your company has been created - simply tick the box at the bottom of the page to do so.

Nomad Mode

Nomad mode was added at the request of the AirHauler 2 player community and represents the most extreme challenge. In Nomad mode you **cannot** own bases or hire pilots. It's just you, and your plane. It's designed as a mode where you constantly roam around the world picking up jobs and missions as you find them.

Note that you can leave nomad mode at any time, **but it is a one way switch**. You can never then go back to nomad mode for that company.

1.2   The AH2 Main Menu

AirHauler 2 for MFS uses a new design of menu to access areas of the game, and control your company.

The main menu bar is shown at the top of the application.
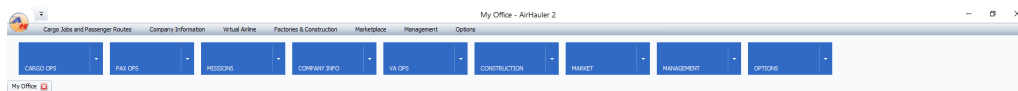
The menu items act as menus, so by clicking the small down arrow to the right of the item, you can access submenu items below it - for example, for the **CARGO OPS** menu:
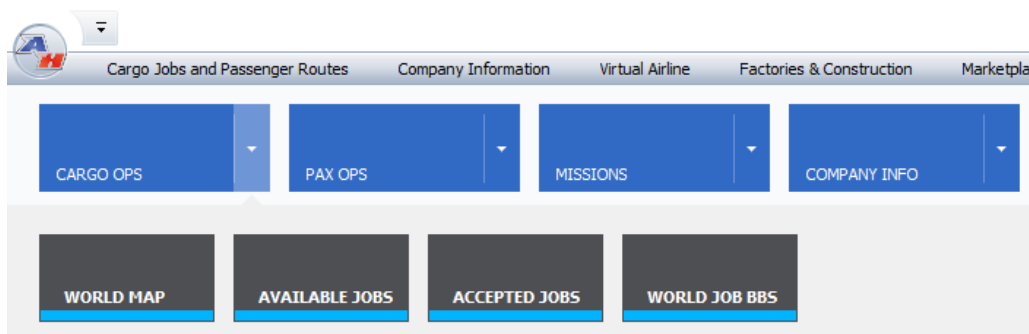
Clicking the menu item itself, it will launch the **first** sub menu item - i.e. if you click the **CARGO OPS** button, to the left of the down arrow, AH2 will open the **WORLD MAP** item directly.

For those users who have used AirHauler 2 before with previous simulators, the original menu is still available - you can access this menu from the very top menu bar and select from the options as normal.
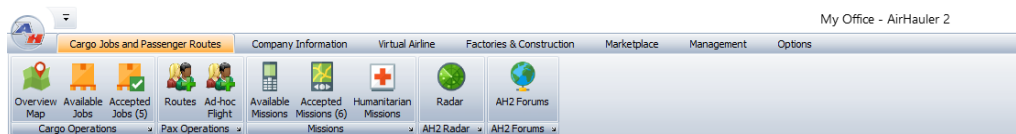
If you would like to disable the MFS style menus for your company, you can do so in the Options -> General Options screen under "Use MFS Style Menu". This option is company specific, not global. New companies will always have the MFS style menu enabled initially.

About your Company

2   About your Company

Everything in AirHauler revolves around your company - you need a company to take jobs, fly scheduled pax routes etc. Your company can own bases, factories and construction facilities, and you can upgrade your bases to help you grow your fleet and expand your empire.

Note that your own personal company is separate from any Virtual Airline which you own or are a member of, although you can transfer jobs from your company to the VA, and transfer money to/from your company to the VA as required.

In addition to your company, you can personally own your own aircraft and you can use them to fly jobs and cargo. Note that your AI Pilots cannot use your personal aircraft however.

2.1   Bases

Your AirHauler company operates from "Bases" (i.e. your offices/premises) at airports around the world. In order to attract business from your clients you'll need to open a base, which will give you access to many more cargo jobs than those you come across while visiting airports.

You can access your company's base roster from the **COMPANY INFO, BASES** menu item on the top menu.
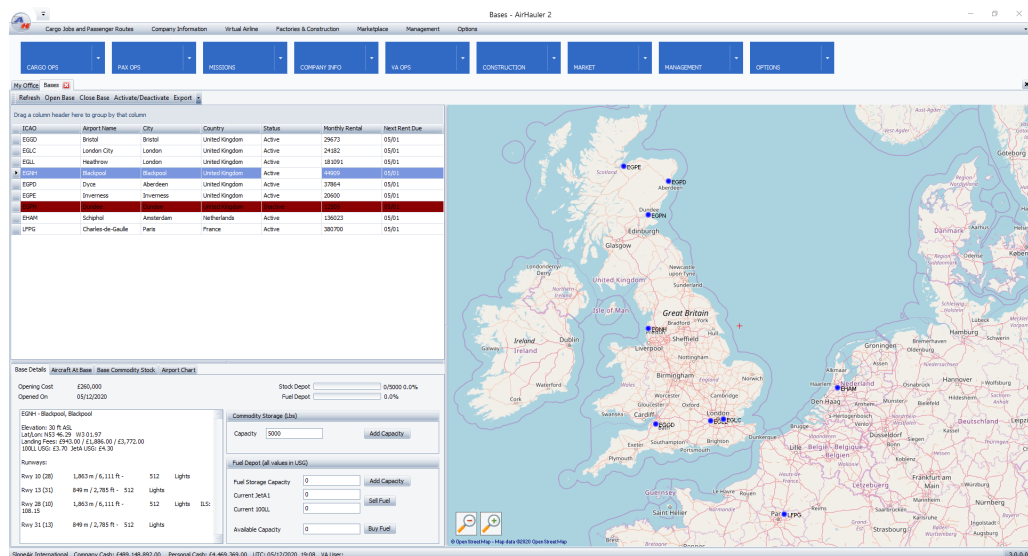
Bases can be modified with space to store commodities, and fuel depots to store fuel (which you can then use to refuel your aircraft). In addition, you can only change the configuration of aircraft (from Cargo to Passenger or vice versa) at one of your Bases, and any repairs carried out to aircraft at your bases attract a sizeable discount.

Opening/Constructing Bases

Bases must be constructed at an airport, which typically takes time depending on the size of the airport you build the base at, up to a maximum of around 10 days. To begin construction, **you must have a pilot at the appropriate airport**, to sign the construction contract, so plan your expansions carefully - you may need to send a pilot off ahead if you wish to expand into new territories.

You can accelerate the build process by delivering "Building Materials" to bases which are under construction (simply unload the commodity at the airport). While a base is under construction, it does not provide any jobs or benefits as described above, until it is 100% complete and "opened". A progress bar will show you the current percentage complete during construction of the new base.

Commodity and Fuel Storage

Bases can store commodities on your behalf (rather than them being loaded onto aircraft), and also store fuel for use in your aircraft. You can increase the size of the commodity storage and fuel depot at your bases by upgrading the facilities, however their maximum size is limited by the size of the airport itself.

Aircraft Configuration - switching between Cargo/Pax and vice versa

You can change your fleet aircraft configuration when those aircraft are at a base. You can change a cargo aircraft to a passenger aircraft (i.e. by installing seats), and vice versa from passenger back to cargo (by removing the seats). There is a charge for doing so, but there is no limit as to how often you can change the aircraft configuration. The configuration change is done from the Aircraft Details panel in the Fleet screen, but the aircraft needs to be located at a base for you to do so.

Discounted Repairs

Performing repairs at your own bases rather than down-route airports will save you money! You get a discount on any repairs conducted at your home base.

Base Activity

Note that if you do not visit your bases on a regular basis, jobs at them will dry up - ensure your pilots visit on a regular basis, and complete some cargo jobs and passenger flights to/from that base if you want to keep it as active as possible.

Active/In-active Bases

If you'd like to temporarily close a base, you can set it as "In-Active". During this time, you will not be charged rental for the base, however it will no longer function as a base - cargo jobs will not be generated at that base, and your base cargo and fuel storage will not be available. To set a base as in-active, select it in the base list, and click the "Activate/Deactivate" toolbar button which will toggle the base's status to in-active.

In-active bases are marked in red on the Base list, and also on the map. You can re-activate the base by selecting it and clicking "Activate/Deactivate" which will toggle the base back to open again.

Closing a Base

Should you wish to close one of your bases, simply select the base in the Base list, and click the "Close Base" toolbar button.

Note you cannot close a base which has a factory currently created at it. You will need to close the Factory first, and then close the base subsequently.

You will then be asked to confirm if you want to close the base. There will be a charge associated with closing a base which is required by the airport for you to restore the site to its previous conditon. Also, closing a base will result in a reputation hit as your local clients will be disappointed that you no longer operate from that airport.

2.2   Your Fleet

To expand your company, you'll want to expand your fleet of aircraft to allow you to carry more cargo or passengers, and also for AI pilots to fly on your behalf to complete jobs and flights.

All the aircraft you own (or lease) are shown in the "Fleet" screen, available from the Main Menu at the top of the AirHauler 2 window under "Company Info", "Assets".
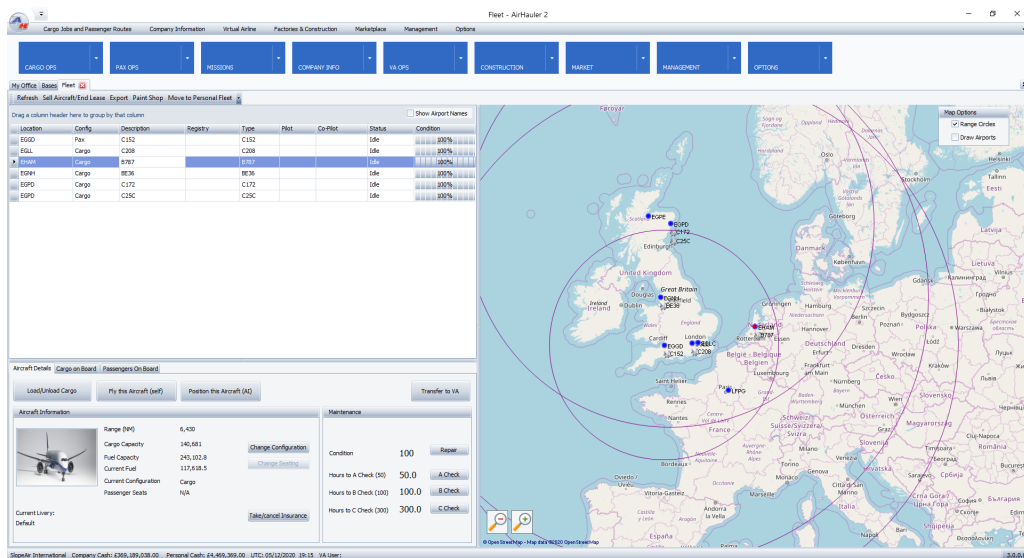
The Fleet screen shows all your aircraft, and their locations and important information about them. If you select one of the aircraft by clicking on an entry in the list, the details for the aircraft will be shown in the lower portion of the screen. This area shows the Aircraft Details, any cargo on-board the aircraft, and any passengers on-board the aircraft.

Aircraft Details

On this tab, you can see the range, cargo capacity, and other details about your aircraft. You can also see the configuration of the aircraft - either Cargo or Passenger, and the seating configuration if it's a passenger aircraft.
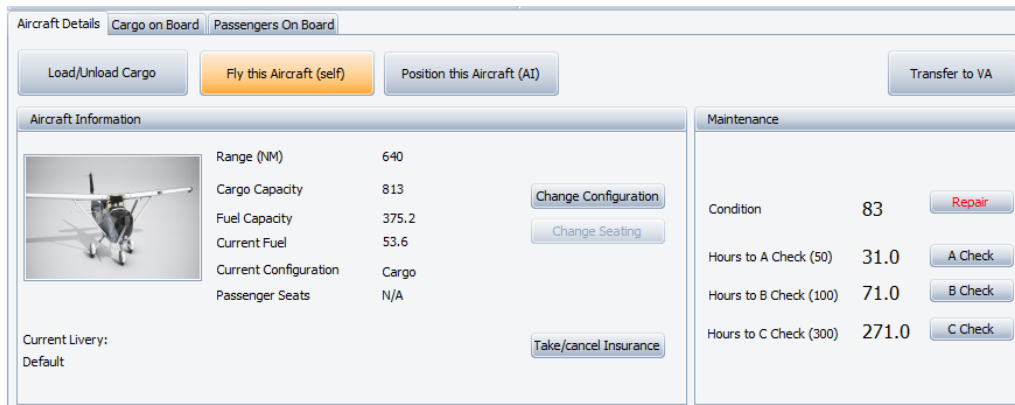
You can change between Cargo and Passenger aircraft configuration at any of your bases - however this will attract a cost for the reconfiguration. You can adjust the seating layout when you change from Cargo to Passenger configuration, or if the aircraft is already configured for passengers, click the "Change Seating" button to change the layout - again a charge may apply!

You can also take out, or cancel an insurance policy on an aircraft from this section. Insurance covers the cost of repairs for a nominal monthly cost depending on the value of the aircraft. Note that if you claim too many times for insurance, the aircraft will be blacklisted and it will not be possible to insure it going forward.

Cargo On-Board

This tab lists all the cargo you have on-board the aircraft. You can load or unload the cargo using the Cargo Loading screen. If you offload goods for a cargo job at the destination for that job, the handling agent will accept your cargo and you'll complete the job when it's all delivered. If you're at one of your bases, and you have commodity storage available, you can offload cargo to that storage area and collect it later. If you are at an airport which is not one of your bases, you can 'dump' cargo by offloading it and the airport will dispose of it for you - be careful when dumping cargo to ensure you don't lose a customer's goods!

Passengers On-Board

For passenger aircraft, this tab shows all the passengers currently on-board and their desired destination. You can deplane passengers if you want to, although if you do so when they're not at their destination you'll be penalised (your reputation will fall).

2.2.1   Type Ratings

Type Ratings

In order to operate aircraft, pilots require a Type Rating for that specific aircraft. This includes both yourself, and any AI pilots you may hire. Note that the Type of the aircraft is based on the Type value in the aircraft.cfg file hence different variants of the same airframe may well require separate type ratings in AH2, whereas in the real world, they would not. This is a restriction of the aircraft.cfg and available data unfortunately.
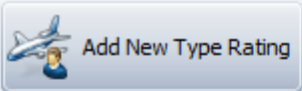
Note that when you start a new company, any type ratings which you hold on other AH2 companies will be automatically transferred over saving you from having to do the type rating again. Note that this is machine specific, and type ratings which were awarded on different hardware will not be carried over.

Personal Type Ratings

When you purchase a new aircraft, if you do not already hold a type rating for that aircraft, AH2 will ask if you would like to undertake the Type Rating test for that aircraft immeadiately. You can accept, and then go to the flight planning screen, or you can decline and add the type rating later.

To add a type rating for an aircraft which you are not currently rated on, go to **Company Information -> Personal Info -> Add Type Rating** (in the right hand side of the screen).

Type ratings you already hold will be shown in the list below.

Aircraft Type	Date Achieved
C152	04/05/2020
C208	08/05/2020
B787	08/05/2020
BE36	08/05/2020
C172	08/05/2020
C25C	08/05/2020
SF34 LITE	11/05/2020
DC-3	12/05/2020
BN-2A Islander	06/06/2020
C421	08/06/2020
SF34	14/06/2020
C441 Conquest II	16/06/2020
CRJ700	18/06/2020
737-800	27/06/2020
HS_748	28/06/2020
A321	04/07/2020
Dash 8-100	14/07/2020
E-jets Embraer 175 E2	23/07/2020
757-200	08/08/2020
Dash 8 Q300	17/08/2020

AI Pilot Type Ratings

Just like yourself, AI pilots need to hold a type rating for an aircraft you want them to fly. Depending on their experience level, they may hold several type ratings by the time you hire them into your company. You can train them for additional types one they have been hired.

To train an AI pilot for a Type Rating, go to **Company Information -> Pilots & Ops**. Select the pilot you wish to train from the list, and in the lower half of the window you'll see this:
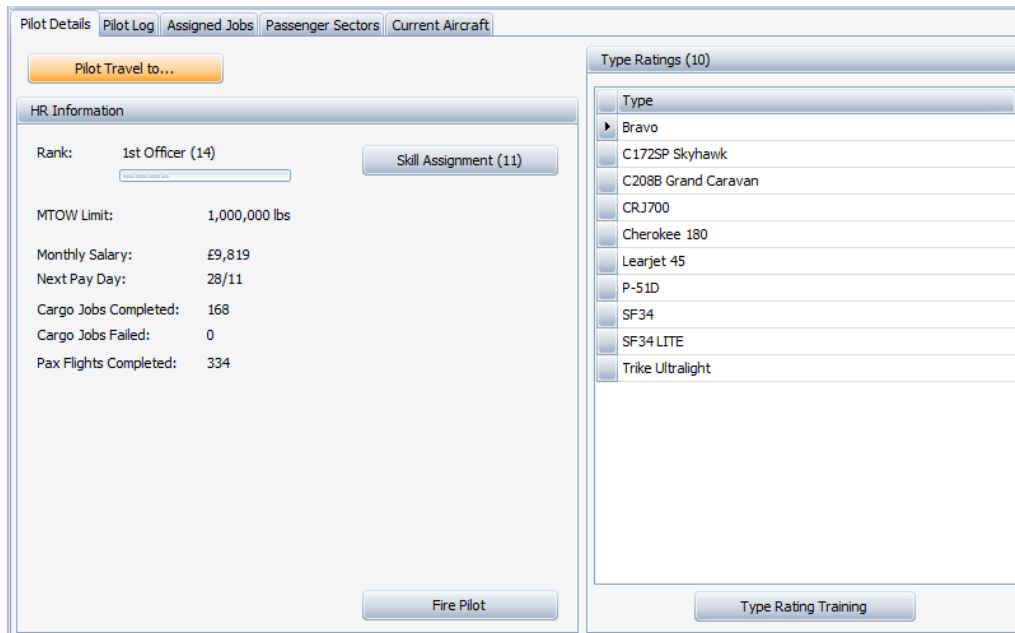
Note that type ratings are not instant for AI pilots, and the time required depends on the size and complexity of the aircraft. Simple single engine type ratings can take only hours, but for a larger aircraft such as a 747

Flying a Type Rating Test

To achieve the type rating, you'll need to successfully carry out a series of maneuvers in the aircraft. You'll be asked to take off, climb to an altitude, change heading and altitude several times, and then land at the airport you departed from without damaging the aircraft. You cannot over pitch/bank, over-speed, or stall the aircraft during the test or you will fail. When landing, you will need to land with a rating of "Ok" or better in order to pass the test (i.e. with no damage caused to the aircraft on landing).

If you are taking the test in an unfamiliar type - for example a new add-on aircraft you have only just purchased and added into FS/AH2, it is highly recommended that you fly the aircraft in MFS first, outside of AH2 to become familiar with the aircraft. Trying to pass the test first time in an aircraft you have never flown before usually ends in a fail.

2.2.1.1   The Type Rating test

Type Ratings

Before you (or any of your AI pilots) can fly your aircraft in AirHauler, you need to hold a Type Rating for that aircraft.   In order to get the Rating you

must pass a simple **Type Rating Test** to verify you can maneuver the aircraft safely!

The test is a simple exercise of take-off, climb to a specific altitude, perform several level and heading changes, then landing back at the airport you departed on without damaging the aircraft.

When you create a new company, you will not hold any type ratings in any aircraft, including the one which you have just bought, so AirHauler will ask you if you want to take the type rating test immediately after setting up a new company.

If you're ready to fly, then select Yes! AirHauler will open your Personal Information page which you can find under **Company Information > Personal Info** from the top menu.

You can choose the aircraft that you would like to take the test in - it should be already set to your first aircraft you chose during the New Game wizard. To take the test, click the "Ok - Pay and take Flight Test Now" button!

Note that Type Rating tests cost money, and for AI pilots, they also take time for them to train and pass the test. There is no limit to the number of times you can take the test, beyond the financial penalty. If you close MFS at any point during the test, or cancel after clicking that you'll take the test, you'll still be charged, so be careful if you're short of cash!

You can take a type rating test for any aircraft which you don't hold a rating for at any time, simply by coming back to the Personal Information screen and clicking the "Add New Type Rating" button in the top right.

Getting Ready for the Type Rating Test

Once you've clicked "Ok" to take the test, you'll be shown the Cargo Loading Screen. This is where we load and unload cargo, commodities and fuel onto the Aircraft.

As this is a type rating test, we don't need to load any cargo on-board, and you should have full fuel tanks.

If you needed more fuel, to load fuel onto the aircraft, slide the slider in the "Fuel Loading" section to the right. It's up to you how much fuel you load, and there may be some on the aircraft already so check to see how much is onboard (shown below the slider) before you load more. Note that for heavy commercial aircraft, many cannot land safely at high weights, so only load as much fuel as you need for a short flight. You can also remove fuel as required.

Click the "Ok" button to proceed to the flight test.

Flying the Test in Microsoft Flight Simulator

AirHauler will now ask you to load Microsoft Flight Simulator - you need to set up the flight with the appropriate aircraft, at the correct airport. You can choose to start from a parking location, or the active runway.

You should now start Microsoft Flight Simulator and set up the flight as requested by AirHauler2 - in this case, using the Beechcraft B36, at EGPD. Note the departure and arrival airports are the same as you will return to the same airport after the general handling portion of the flight test. For type rating flights, there is no requirement to load cargo or fuel onboard the aircraft.   (Remember to ensure the aircraft in MFS has fuel loaded however if you are flying with realistic settings).

Once you are in the cockpit in Microsoft Flight Simulator, and ready to undertake the flight, alt-tab back to AirHauler2, and click "Ok". AirHauler 2 will then connect to MFS to track the flight.
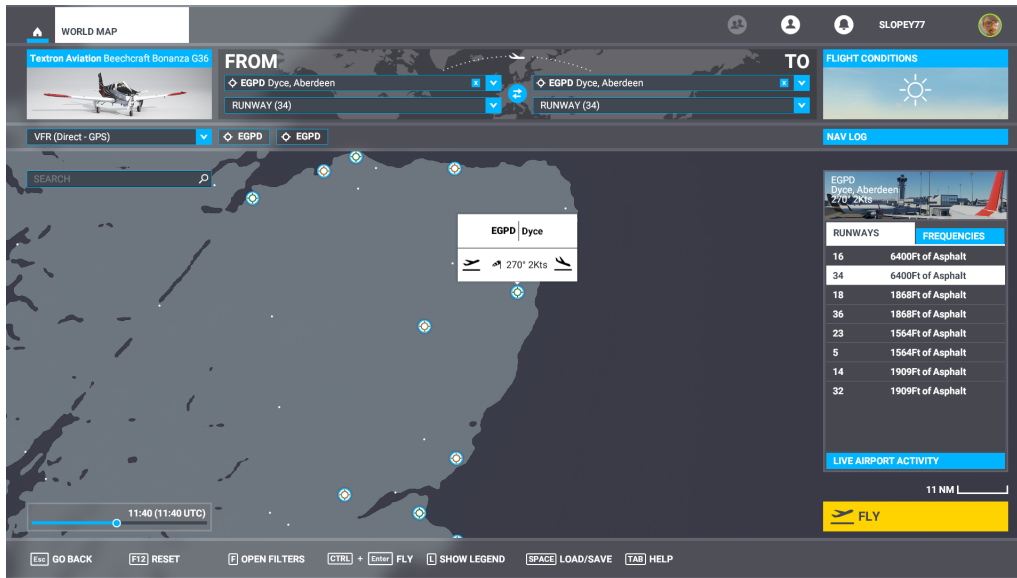
You'll see the initial "Welcome to your type rating message" once AH2 has successfully connected. You then need to taxi and take off, then follow the Type Rating test prompts. While on the test, you should not overspeed or stall the aircraft, and to not make large pitch or roll maneuvers (in the case of roll, no more than 40 degrees). If you do make violent maneuvers, you'll hear "Bank Angle, Bank Angle" or "Pitch Angle, Pitch Angle" from the aircraft's announciator.

Start up your aircraft, taxi and take-off as normal. Once you are around 300ft about ground level, you'll be given altitudes and headings to fly. Fly each in turn, holding the altitude and heading until the next prompt.


When prompted, return you your departure airport and land smoothly. Once

you've landed, taxi and park, and shut down the Aircraft engines. You need to land with a rating of "Smooth" or better - so be as gentle on the touchdown as you can!

If all goes well you'll have passed the Type Rating test, and can now fly this aircraft in AirHauler! Well done Commander!

If things go less well, you'll fail the flight test and will have to resit. To do so, go back to AirHauler, to your Personal Info page, and try again with the "Add New Type Rating" button.

Once you've shut down the engines you can go back to the MFS main menu, or exit the simulator. If all has gone well during the Type rating flight - you'll have passed the test!
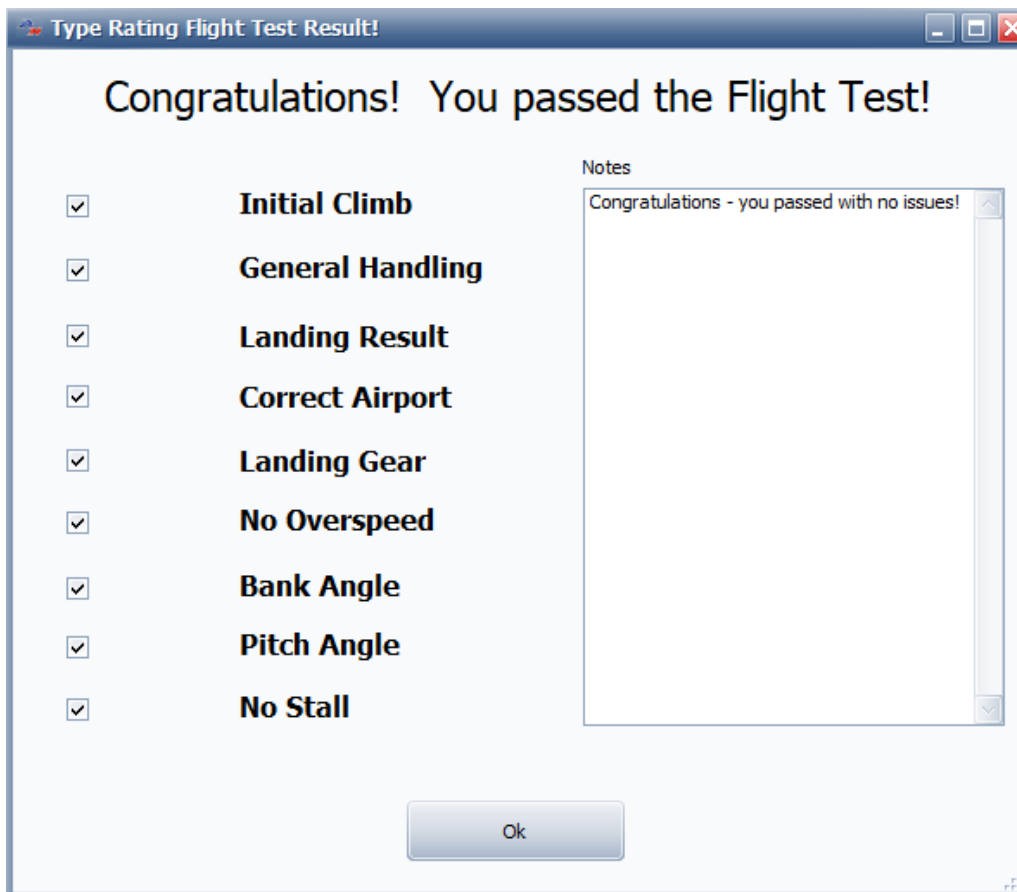
As we have no cargo to offload, we can simply click the "Finish Monitoring" button on the Flight Monitor window.
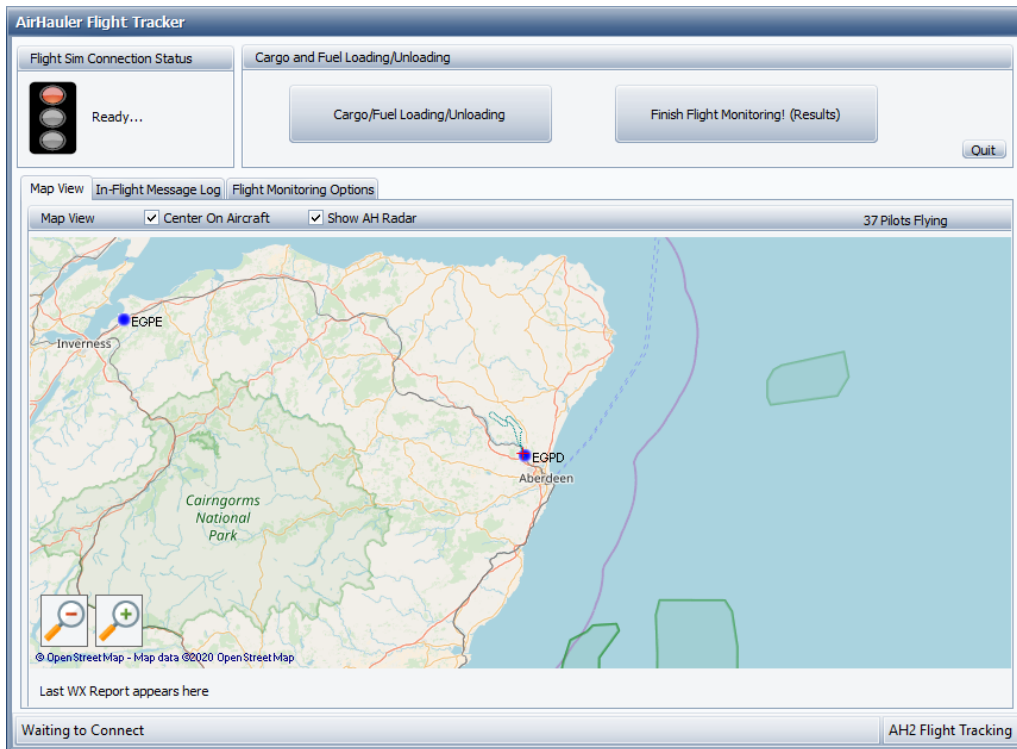
You'll be shown flight statistics from the flight including landing information and other data for you to review. Click "Ok", and you will then be returned to the main AirHauler screen.
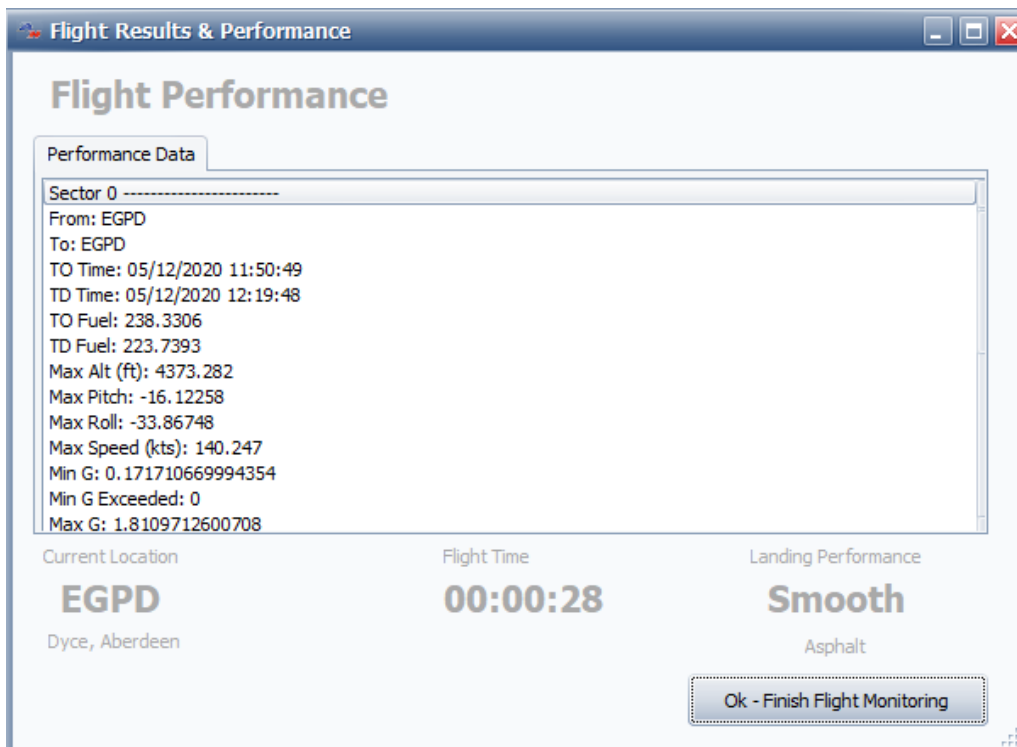
2.2.2   Cargo Loading/Unloading

You can load or unload cargo to or from your Aircraft using the Cargo Loading screen.

This screen is automatically presented when choosing "Fly Now" for a job, mission or passenger group, or you can open it manually from the Aircraft's details on the Fleet screen by clicking the Load/Unload Cargo button under the Aircraft Details section for a selected aircraft.

From the Cargo Loading screen you can load and offload cargo, and also refuel your aircraft (or offload fuel if you need more cargo space).
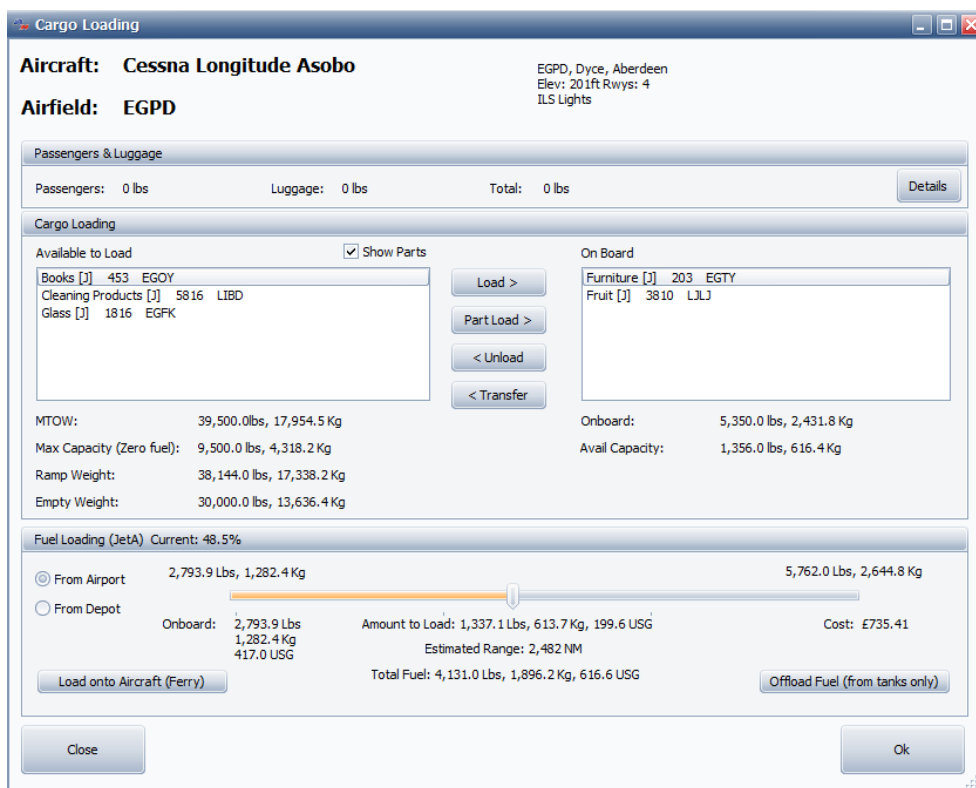
NB in AirHauler2, Cargo capacity is *equal to the MTOW of the aircraft, minus the empty weight, currently loaded fuel weight and any cargo you have on board* - i.e. if you need more capacity, you can offload fuel to increase it. In the same way, if your aircraft has full fuel tanks, the cargo capacity will be lower. **Note that "Cargo Capacity" on various data grids within the application usually refers to the cargo capacity when the aircraft is fully loaded with fuel**, not the current, or maximum capacity the Aircraft can load.

If you are loading cargo onto a passenger configured aircraft, any passengers on-board and their luggage will be shown at the top of the cargo loading window, and the amount of cargo you can load onto the aircraft will be adjusted accordingly taking the passenger weights into account.

Transferring Cargo

If you have one or more other aircraft at the same Airport, you will be able to transfer cargo between them. When this is the case, you'll see the "< Transfer" button appear on the Cargo Loading screen. You can use this button to move cargo from the current aircraft to another of your aircraft at the same Airport. Note that the aircraft which you transfer the item to must have enough cargo capacity available to move the entire item - it is not possible to split the load.

If you have other aircraft at the same airport, you can transfer cargo between those aircraft from the Cargo Loading screen without having to offload to airport storage first.

Dumping Cargo

In rare circumstances, you may wish to destroy, or "dump" a cargo item rather than offload it. To dump the item, select it from the right hand "On Board" cargo list, **right-click** and select "Dump Cargo!". You'll be asked to confirm the action, and if you choose "Yes", the cargo will be dumped. Note that the item will be irrevocably destroyed, and if it is required for a mission or a cargo job, it will no longer be possible to complete that job or mission. Use with caution!!!
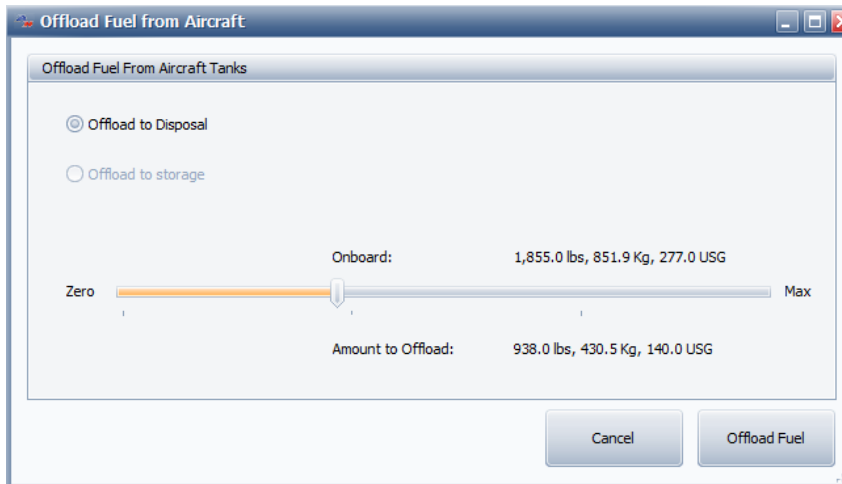
Loading/Off-loading Fuel

The lower section of the Cargo Loading screen allows you to re-fuel your aircraft. Simply drag the slider to adjust the amount of fuel to be loaded onto the aircraft. You can also offload fuel if you need to free up some weight to take more cargo, or for shorter flights.
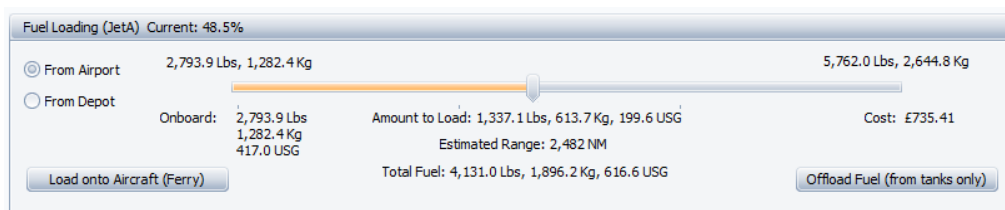
By default, the fuel will be bought from the airport directly, however you can also opt to have the fuel supplied from the fuel depot at your base (provided the base has a depot and it has the appropriate type of fuel stored in it). Change the selector to "From Depot" rather than "From Airport" to use your depot stocks rather than the fuel from the airport supplier.

If you would like to offload fuel, use the button on the right hand side of the section and then select the amount to offload. This will bring up the offloading fuel window. You can use the slider to adjust how much fuel you wish to offload from the tanks of the aircraft.

You can either dispose of the fuel, or if you are at a base with a fuel depot, you can offload the fuel to the storage depot to be reused. Select the amount to offload, and the location to offload it to, and then click "Offload Fuel".

Ferrying Fuel

You can also transport fuel on the aircraft, however this fuel is not included in the fuel tanks and is not available for use in flight. If you wish to move fuel stocks around between airports, you can use the Ferry option by clicking the "Load Fuel onto Aircraft (Ferry)" button. Note that the fuel type must match that which the aircraft uses itself (i.e. you can not ferry 100LL fuel in an aircraft which uses JetA).
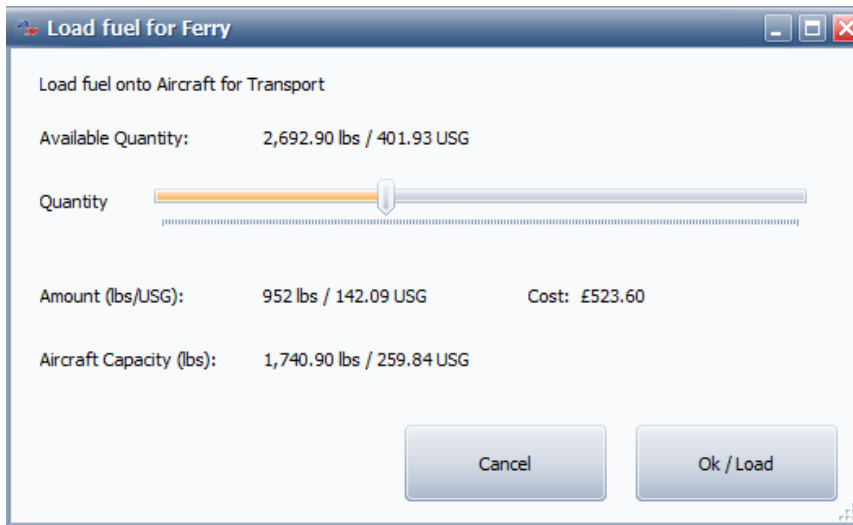
Use the slider to select the amount of fuel you wish to ferry in the aircraft, and it will be loaded as cargo onto your aircraft.

2.2.3   Condition, Maintenance and Repairs

Aircraft in AH2 have both a condition, and maintenance hours. Condition describes the physical condition of your aircraft as a percentage - a pristine aircraft has a condition of 100%, and a destroyed aircraft has 0% condition.

Rough handling, or hard landings will reduce the aircraft's condition, and it will need to be repaired. Aircraft with a lower condition are also more susceptible to systems failures whereby systems on the aircraft will fail in flight and may lead to the aircraft being uncontrollable!

AI pilots will repair an aircraft if they are uncomfortable with the condition it is in - but that depends on their personal preference. Some AI pilots will only fly well maintained aircraft, whilst others will be happy to fly at a much lower condition.

Aircraft below 20% condition are not airworthy, and cannot be flown until repaired!
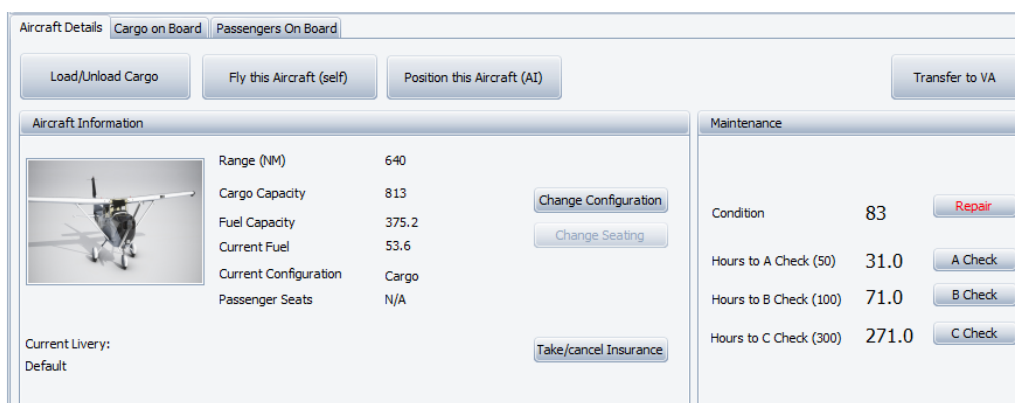
A, B and C Checks

To keep your aircraft in compliance with air worthiness regulations, it must be regularly inspected. These take the form of periodic checks, depending on how many hours the aircraft has flown.

There are 3 different checks which need to be periodically performed: A, B and C checks.

Completing a higher check automatically resets the hours for the lower checks, i.e. completing a B check will automatically also reset the A check.

A check: every 50 hours
B check: every 100 hours
C check: every 300 hours

The A check is a simple airworthiness check, the B check is a more involved inspection, and the C check is a full check of the entire aircraft. The checks have differing costs to perform depending on the size, and value of the aircraft.

AI pilot performing cargo jobs and positioning flights will always complete a check if the aircraft requires it - so be careful when scheduling AI activities close to check times.

NB: Passenger flights and flying hours are **NOT** currently subject to A, B, C checks to ease scheduling. It is assumed that aircraft performing the passenger flight will be ramp checked by engineers continuously throughout the weekly schedule.

Repairing an Aircraft

As aircraft fly around, they loose condition as they collect wear and tear on the airframe and interior. Aircraft can also be damaged by hard landings or rough handling, resulting in a loss of condition or damage to specific systems. Aircraft can be repaired to bring them back to top condition.

To repair an aircraft, click the "Repair" button next to the condition value. You'll then see the "Repair Aircraft" screen where you can choose what you want to repair on the aircraft.
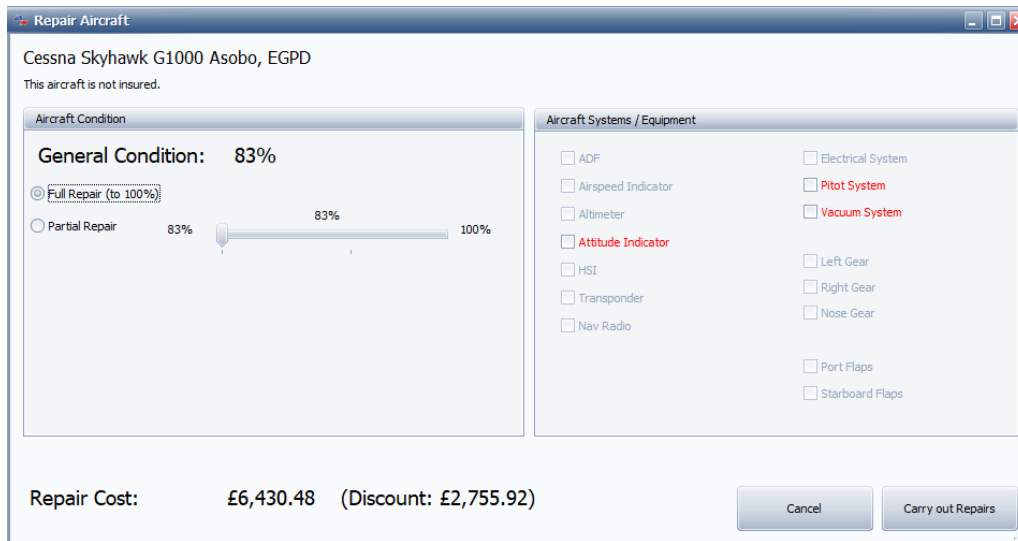
Aircraft have both *General Condition* and *Systems and Equipment* which are subject to failures over time. You can select which to repair from this screen.

To repair the aircraft to 100% condition, leave the selector on "Full Repair". You can also opt to partially repair the condition of the aircraft from the "Partial Repair" option - adjust the slider to determine how much of a repair you wish to carry out.

You can also repair individual systems on your aircraft. Systems fail over time, or due to rough handling and hard landings, and should be repaired before flying the aircraft. Note that these systems will have an effect on the way your aircraft flies in the simulator, so it's best to keep these in tip top condition and repair any failed systems immediately!

The costs for the repair is shown in the bottom left of the repair screen.

When you're ready to make the repairs, click the "Carry out Repairs" button.

Note that AI pilots will always repair an aircraft to 100% if they find it in a condition that they find unacceptable - every AI pilot has a different threshold as to what level of condition they are willing to accept.

VA aircraft can also be repaired in this way, provided the pilot has permission to do so.

### 2.2.4   Buy and Leasing Aircraft

Buying new Aircraft

You can buy new aircraft to expand your fleet. If purchasing an new aircraft is too expensive, you can also lease aircraft for a monthly fee (which you can buy out and take ownership of). You can also see if there are any 2nd hand or used aircraft available which would fit your requirements - these aircraft are usually offered at a large discount over new aircraft.

Also note that you can construct aircraft from parts which can be found for sale at airports around the world.

To buy a new aircraft from the Manufacturer, click the "**Buy Aircraft**" item from the **Market** main menu.
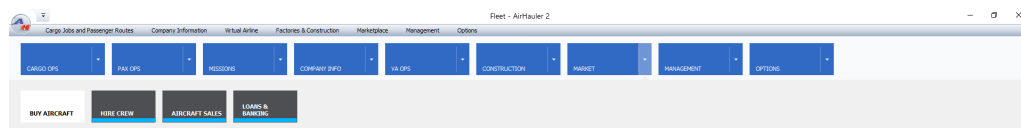
Note that AH2 shows aircraft from ALL editions of MFS, even you only own the standard edition!. Your AI Pilots can fly any aircraft, however you will not be able to fly the aircraft in the sim if you do not have access to it in that edition of Microsoft Flight Simulator.
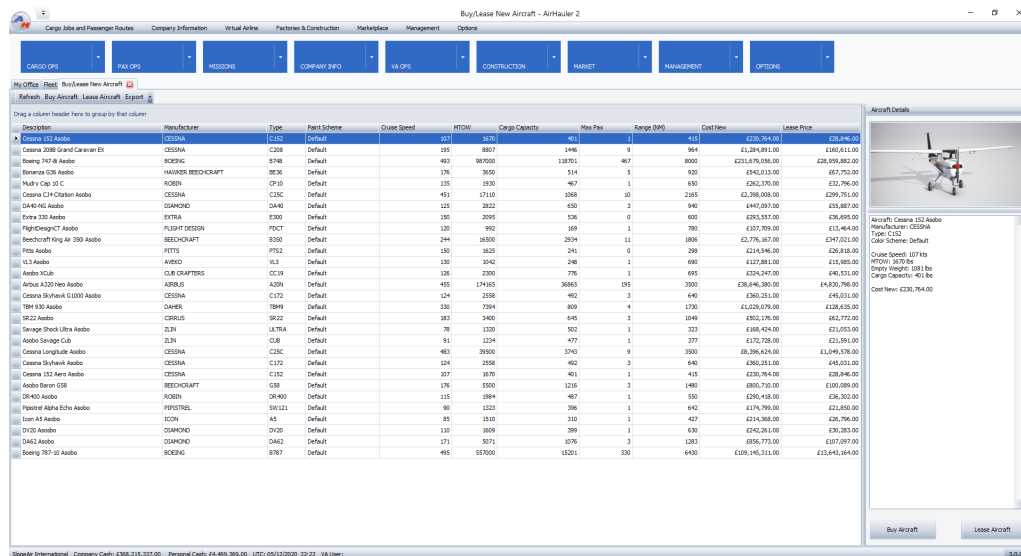

Select the aircraft you wish to purchase from the list of available aircraft, and click "Buy Aircraft" or "Lease Aircraft" as required.

You'll then be asked to confirm the purchase, and if you would like the aircraft to be added to your Personal Fleet, or your Company Fleet.
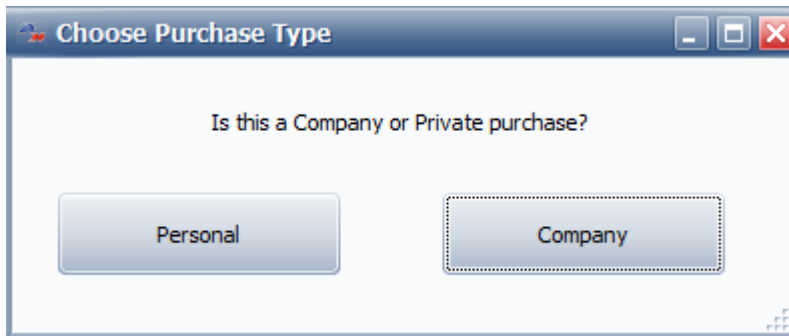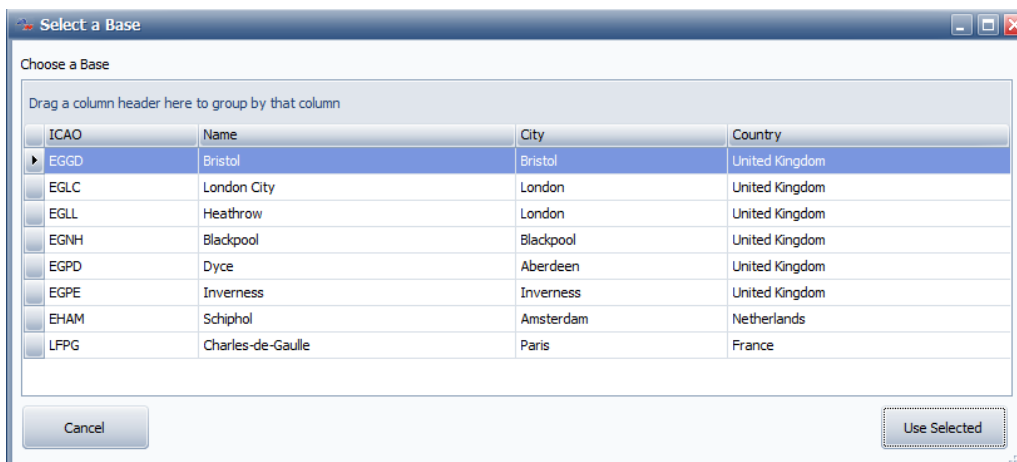
You can also then choose the configuration of the aircraft - either passenger or cargo. Note that passenger config aircraft *can* transport cargo also, however cargo config aircraft cannot transport passengers (unless you change the config at a base).
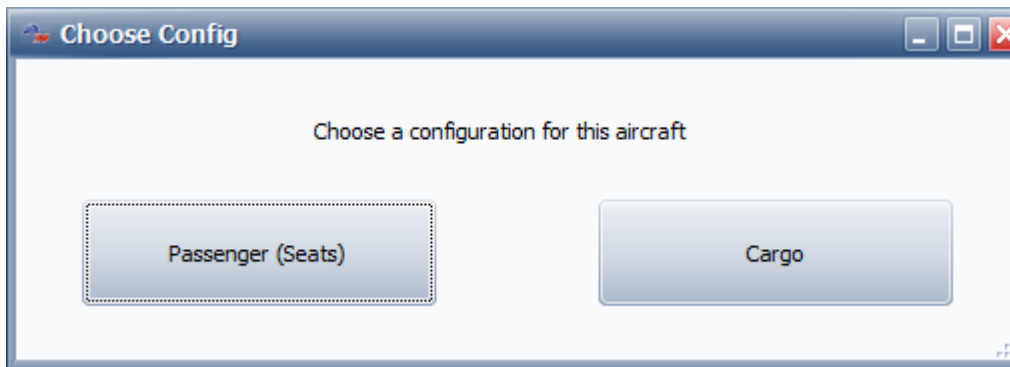
Finally, choose the base which you want the aircraft delivered to.

If the aircraft is a passenger configuration aircraft, you'll be asked to select, configure and confirm the seating configuration after selecting the delivery airport.
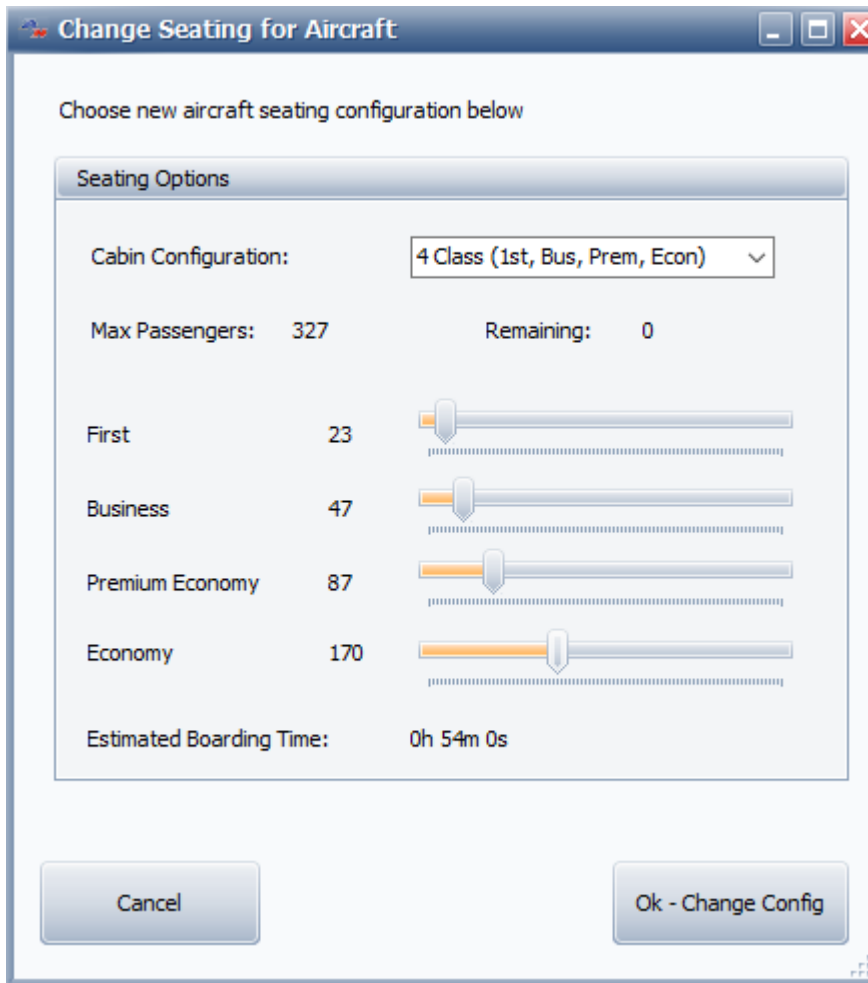
Leasing Aircraft

Rather than purchasing Aircraft outright, you have the option to Lease aircraft to your company. You will be charged a deposit for the aircraft, and then an on-going monthly rental.

Rental charges cover both the interest on the aircraft value, and a portion of the capital value of the aircraft. You can "buy out" the aircraft at any time by paying the remainder of the capital cost against the aircraft at which point it becomes yours as if you had bought it outright originally.

To buy out the aircraft click the "Buy Out" button shown in the Aircraft Details section of the Fleet management screen.

2.2.4.1   Buying Used/2nd Hand Aircraft

Rather than purchase aircraft directly from the manufacturer as new, you can purchase aircraft from a world wide Used Aircraft Market.

You can find the Used Aircraft Market on the Market - click the "Aircrafts Sales" icon to review the available aircraft.

Aircraft will periodically appear for sale in a variety of locations and conditions. You can purchase them, and either have them delivered to your airports for a cost and delay, or you can fly the aircraft back yourself if you prefer. Aircraft will also be sold from this list to other buyers, so if you see a bargain, you should snap it up quickly as it may not be there for long!

To purchase a Used aircraft, simply select it from the list, and then click "Buy Aircraft" in the Aircraft Details section below.

After confirming if you'd like the aircraft to be added to your Personal or Company fleet, you'll be prompted if you would like the aircraft delivered to an airport, or if you want to collect it and fly it out yourself.
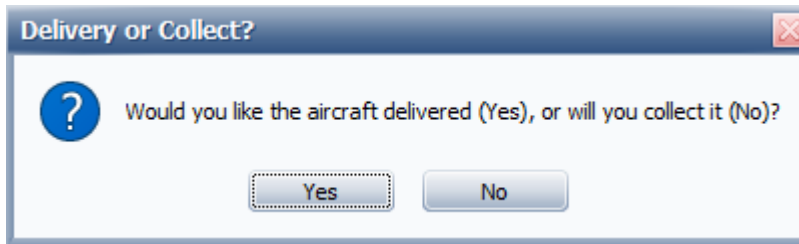
If you opt for a delivery, you can specify where you would like the aircraft to be delivered to. Note that aircraft deliveries are not instantaneous for Used Aircraft, and will take some time to complete.

2.2.5   Insurance

Aircraft mishaps do happen, and when they do so they are usually very expensive! To guard against high repair costs when you continually slam your fragile aircraft into the nearest tarmac surface, it is recommended that you take out an insurance policy on the aircraft.

Taking out an insurance policy costs a monthly premium, which will then allow you to charge the cost of repairs to the insurance company rather than taken out of your company bank account.

Insurance premiums are typically in the order of 10% of the aircraft hull cost, per annum and are billed monthly. You can cancel the insurance policy at any time, however you will not be refunded any premiums you have already paid.

When repairing an insured aircraft, you will be asked if you would like to use the insurance, in which case an Excess fee is charged, and the repairs are billed to the insurance company. This results in a "claim" being posted against the aircraft however, and WILL increase your monthly premiums.

After 5 claims on a particular aircraft, your insurance company will refuse to insure that aircraft in the future, so be careful about which repairs you claim for!

Taking out/Canceling Insurance for an Aircraft

To take out insurance one of your aircraft, select the aircraft from the Fleet screen, and then in the Aircraft Details tab at the bottom of the screen, click the "Take/cancel Insurance" button. If the aircraft is already insured, you'll see the monthly insurance payment value to the left of that button along with the next payment due date for the policy.

To cancel the insurance policy, again, click the "Take/cancel insurance" button and the aircraft will no longer be insured.

2.2.6   Cargo and Passenger Configuration

Aircraft can either be configured as passenger (Pax) aircraft, or as cargo aircraft (i.e. with no seats in the main cabin).

You can change the configuration of a fleet aircraft at any of your bases. To do so, select the aircraft from the list on the Fleet screen, and click the "Change Configuration" button on the Aircraft Details tab.

If changing from passenger to cargo, you'll be asked to confirm that you want to change the configuration, and be given a price for the modification. Clicking "Ok" will change the aircraft to the cargo configuration.

When changing from cargo to passenger configuration, you'll be able to set up the various seating class options for this aircraft.
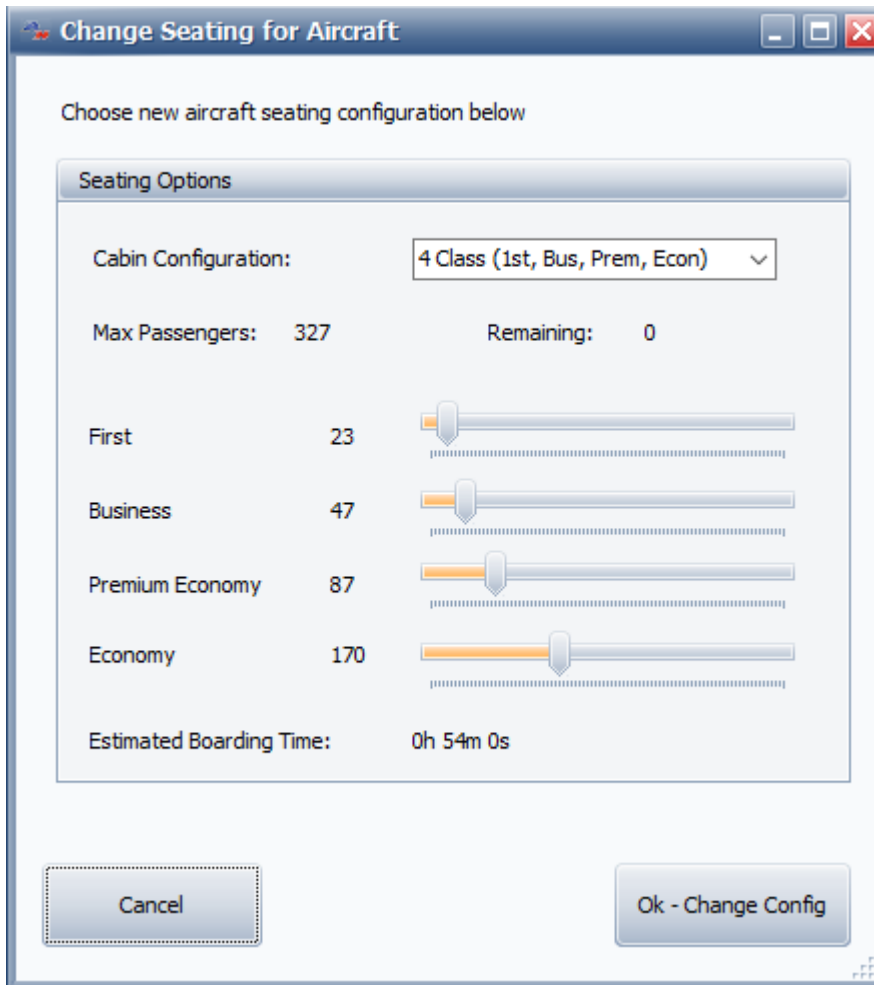
You can choose between 4 types of cabin configuration.

Economy Class Only
Economy and Premium Economy Class
Economy, Premium and Business Class
Economy, Premium, Business and First Class

The "maximum passengers" shows the amount of passengers which you can board onto the aircraft. For the higher classes, this number will reduce slightly as the larger seat pitch and pods mean that you can only accomodate fewer passengers as the seats take up more space.

Passengers will pay more for higher classes of seating, especially on longer flights with larger airliners.

Use the slider controls to allocate the seating class numbers, ensuring all seats are allocated. The cost of the reconfiguration will be shown at the bottom of the Seating Options area. The higher classes of seating cost more than the standard economy class seats.

Note that you need to assign all the passenger seats to a class, i.e. the "Remaining" count should show zero when you have finished configuring your seat classes.

When you are happy with the configuration, click "Ok - Change Config" to modify the seating plan in the aircraft and have those seats fitted, provided you have enough company funds to make the seating changes.

You'll then be returned to the Fleet screen where the aircraft will show as the new configuration. For passenger aircraft, the seating class breakdown is shown in the Aircraft Details tab

2.3   Finance and Reputation

As you complete cargo jobs, missions, and fly passengers around, you'll be rewarded both financially, and your reputation will increase.

There are 3 types of reputation, for cargo, passenger and missions respectively. These are also averaged into an "Overall Reputation".

Reputation affects many aspects of your AirHauler 2 company. It determines the types of cargo jobs you're offered, affects your passenger ticket sales, and also the number of pilots available for hire amongst other things.

Cargo reputation is gained by completing cargo jobs from one airport to another. You'll get the largest increase for jobs which go to airports which you don't have bases at. From cargo jobs between airports which you have bases at each end, you'll gain less reputation. As your cargo reputation increases, you'll be offered more lucrative cargo jobs.

Passenger reputation is gained by flying passengers to their destination safely and on time. While you're flying them, passengers have a satisfaction rating with the flight also - you need to keep them happy to ensure they'll recommend your airline to other passengers! A crash or hard landing can have a negative effect on your reputation, while arriving ontime, after a smooth flight will result in an reputation increase. The higher your passenger reputation, the more passengers will want to fly with you, and they'll also pay more per ticket.

As you travel around the world visiting airports, you'll meet various clients at those airports. Each of those clients can provide you with missions to complete on their behalf, whether that's supplying them with commodities, moving high value goods or acting as a courier service. Completing these missions gains you Mission Reputation, however you also gain reputation with the individual client themselves - the more they trust you, the more lucrative missions they'll provide.

As your reputation and bank balance changes, the details are recorded, and graphed in the Company Info screens as detailed in the next topics.

2.3.1 Reputation Details & Log

Company Reputation Graph and Reputation Log

Information about your company reputation is shown on the "**INFO"** menu under the "**COMPANY INFO**" item.

From here, you can see your current reputation levels for cargo jobs, passenger flights and missions, along with your overall reputation value. You can also view your reputation change over time as a graph.

The 2nd tab shows a log of reputation change entries. Any time your reputation is negatively or positively affected the reason for the change will be logged on this grid.

You can refresh the grid to ensure you're view current information, and also export the log out to Excel if you wish. You can also clear down the reputation log which reduces the size of your company file and can make reviewing new entries easier if you have many historical entries which you don't want to keep. Note that clearing the log will reset the reputation graph and the graph will be drawn as your reputation increases or decreases from then on.

Renaming your Company

You can rename your company from the Company Info screen also - use the "Change Name" button on the right of the window to change the name of your company. Note that the filename for your company's save file will not be renamed, and it will have the same name that you used to create the company initially.

2.3.2   Finance

The "**COMPANY INFO**" then "**FINANCE**" menu option provides financial detail about your AirHauler 2 empire!

Finance Overview Tab

From the Finance Overview tab, you can review your current company cash amount (which is also shown in the status bar at the bottom of the AirHauler 2 window at all times), and also review your company overheads with summary financials on your monthly outgoings and income.

The top graph shows cash vs your overhead over time, and the bottom shows the assets your company owns over time including Bases, the number of aircraft in your Fleet, the number of Pilots you have hired, and the number of Factories you have operating.

A pie chart in the bottom right of the screen summarises expenditure.

Company Ledger

The company ledger is accessed from the **COMPANY INFO** menu, and the **LEDGER** sub item. The Ledger shows the entire transaction history for your company. This is a list, in date order, of any income and expenditure for your company.

You can re-order the list if you would like, and also group by any column which is particularly useful when looking at expenses and income entries for a single pilot. You can also "Clear" the ledger from the toolbar menu at the top of the Finance screen, or export the entire list to Excel with the "Export Ledger" toolbar button. Exporting the ledger before clearing down the list is recommended should you wish to review the information at a later date.

Note that clearing down the ledger will remove some of the information from the Finance Overview graph tabs, however, the graphs will show data from that point forward.

Loans - COMPANY FINANCE screen

You may need additional capital when setting up or operating your company, and you can do that by applying for loans with the bank in AirHauler 2. Loans are managed from the "Loans" tab on the finance screen, and from here you can take out a new loan, make a repayment towards an existing loan, and also repay the capital on an existing loan. All loans in AirHauler 2 are provided on an interest only repayment basis - i.e on a monthly cycle you'll be charged the interest for the loan, but this will not repay the capital amount. To settle the loan you will need to repay the capital amount whilst also repaying the interest every month as required.

Taking out a New Loan

To take out a new loan, click the "Take out New Loan" button on the right hand side of the Loans tab. You'll then be offered a new bank loan, up to a certain value - which will depend on the size and reputation of your company - at a specific interest rate, which again will be determined by your

company's reputation. The higher your reputation the lower the interest rate you will be charged.
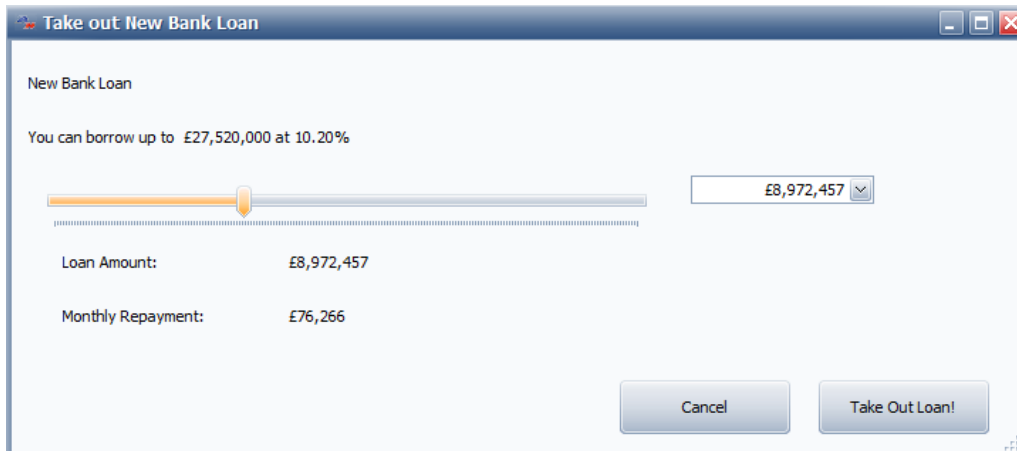
Use the slider, or the drop down box to specify the value of loan you wish to take out, then review the monthly repayment to ensure you will be able to meet those payments (you will be harshly penalised if you do not!), and click "Take Out Loan!" when ready.

The details of your new loan will be shown in the Loans list, and you can select that entry to repay or pay the interest on the loan.

Paying interest or clearing captial for a loan

To pay off the next installment for the interest payment for your loan, select the loan from the Loans list, and click the "Make Repayment" button on the right hand side of the Loan Details section. Note that you can pay multiple payments one after another and that will push back the next automated interest payment by the appropriate amount of time - i.e. if you pay 3 months up front, you will not be billed again for interest on that loan until 3 months time.

To repay some of the capital of the loan, and reduce the amount you have borrowed, click the "Repay Capital" button. You can then opt to pay back a portion of the capital amount, or the full amount which will settle the loan. The settlement figure will be the remaining capital, and one month's interest payment.
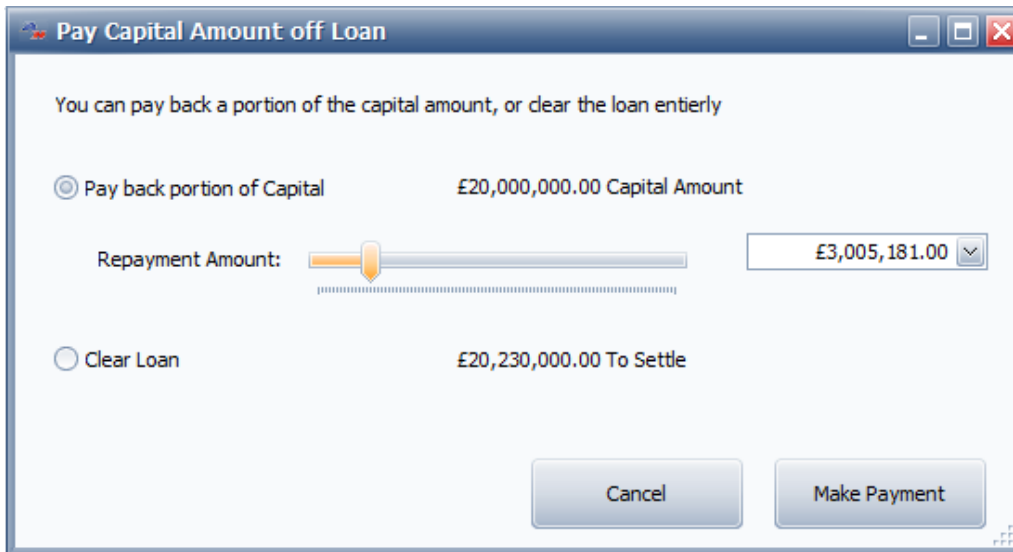
If you opt to pay only a portion of the capital, you an select the amount you wish to repay using the slider or drop down box.

Once you have decided on the amount to repay, click the "Make Payment" button to complete the transaction. If you opt to clear the loan, the loan will be removed from the list and you will no longer be charged interest on the loan on a monthly basis.

The ATM

You can withdraw or deposit funds from or to your company bank account. Your company account is separate from your personal account, and also your Virtual Airline's bank account if you have a VA. Some purchases require that you pay from your personal account, and in general, expenses related to personal aircraft will be withdrawn from your personal account.

To withdraw money from your corporate to your personal account, use the "ATM" toolbar button.

You can then choose to Withdraw Funds, or Deposit Funds. In both cases, the operation is the same - enter the amount of money you wish to withdraw or deposit from your personal account, and click the "Transfer" button

The transfer will be completed, and an entry will be added in the Ledger to reflect the withdrawal/deposit.

2.3.3   Company Logo and Identifier

You can change your company logo to a custom logo within AirHauler 2. This logo is used on the "Choose Company" screen when you first start AirHauler 2 (unless you only have one company file in which case it will be loaded automatically).

To change the logo for your company, select the "Company Logo" tab on the "**INFO**" menu item under the "**CORPORATE INFO**" menu.

To select a new logo, click the "Load Image" button and you'll be asked to select an image file from your PC. Selecting file and clicking "Ok" will set the logo to the new image for you.

Company Identifier

You can also set your company identifier, i.e. callsign. This is pre-pended to your passenger sector numbers, and shown on the AirHauler 2 radar as you fly around.

Identifiers can be up to 4 characters long.

To set the callsign/identifier, simply change the value in the text box, and click "Save Ident".

2.4   Pilots & Ops

The **COMPANY INFO, PILOTS & OPS** menu lists all the pilots working for your company, their status, and their current assignments if any.

Note that **you** as the company owner, do NOT appear in the list - as the player, you can fly any aircraft, from any airport at any time, so your rank, status and location is not really relevant in the way that it is for AI pilots.
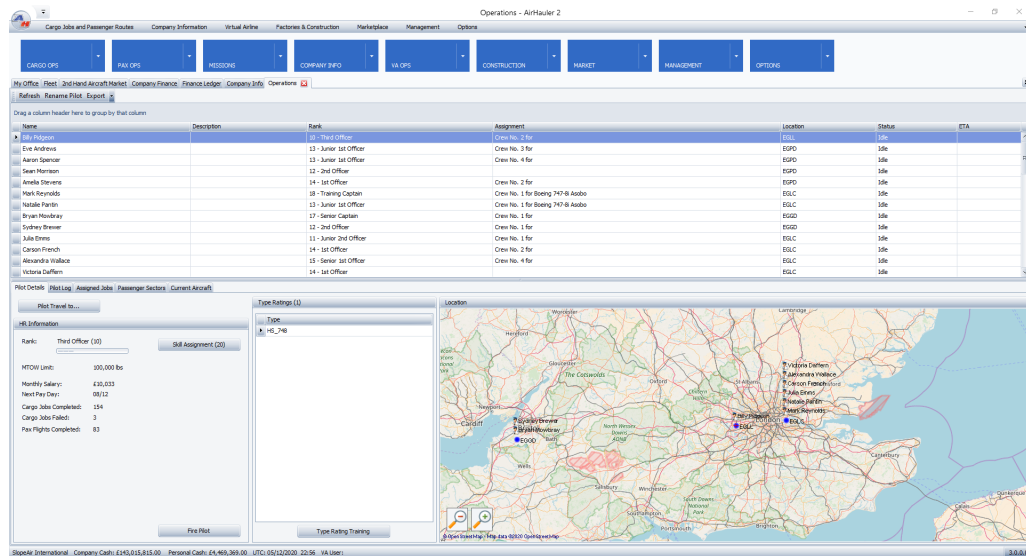
From this screen, you can dismiss pilots who are under-performing, change assignments, and review the jobs assigned to your staff.

2.4.1   Hiring & Firing Pilots

Hiring Pilots

When your expanding your company, you'll need aircraft, but also pilots to fly them.

New pilots can be recruited for your company from the **MARKET** menu, then the **HIRE CREW** sub-menu.
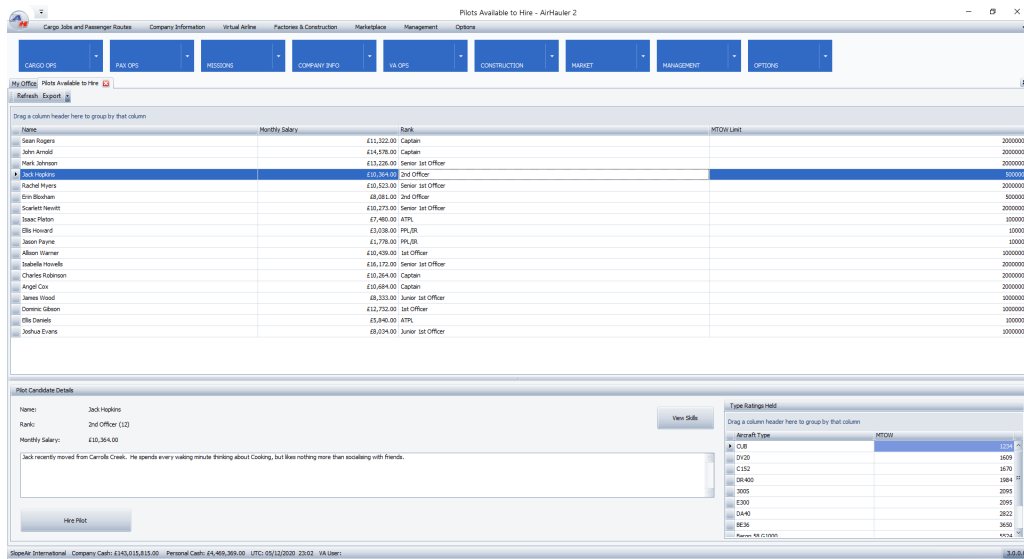
This screen lists all available pilots for hire currently. Pilots will drop in and out of this list as their availability changes. They have a monthly salary requirement for their pay, and their rank which is based on the number of successful jobs or passenger flights which they have completed. Pilots also have a limitation on the size of the aircraft they can fly for any given rank, based on the MTOW of the aircraft.

Pilots for hire will also have one or more type ratings, allowing them to fly specific aircraft - ensure you hire a pilot with the appropriate type ratings for your fleet! If not, you can train the pilot on that type from the **COMPANY INFO, PILOTS & OPS** menu in the normal manner.

Pilots also have a number of skills which they have gained throughout their career. As pilots rank up, they gain additional skill points which you can spend to develop your pilots as their rank increases. To view the pilot's current skill set, click the "View Skills" button in the Details area for the selected pilot.

If you'd like to hire the pilot into your company, click the "Hire Pilot" button in the bottom left of the screen. You'll be asked to confirm, and you'll be able to specify a Base for the pilot to be located at. They're now available immediately for duty, and you can assign them jobs or to passenger flights as necessary.

Firing Pilots

Occasionally, you may need to fire a pilot either for cash flow reasons or because of poor performance. Some pilots are better than others! Some will want an aircraft at 100% before they'll fly it while some will be happy at 70% condition, some will fly slightly faster whilst others will be slow, and some

will be better at landing that others. Keep an eye on your pilots, and fire under-performing members of the team to ensure your company stays successful!

To fire a pilot, select the pilot from the **COMPANY INFO, PILOTS & OPS** menu, then choose "Fire Pilot" from the bottom of the HR information section. Once a pilot has been fired, they will immediately leave your company and will not be available to be re-hired in the future.

2.4.2   Pilot Skills and Ranks

Each of your pilots has a Rank (or level) which determines how heavy an aircraft they can fly. Pilots gain experience by completing cargo or passenger jobs/flights, and will rank up when they achieve enough experience to reach the next level.

NB: Pilots only gain experience for jobs which are over 40NM in distance between the departure and arrival point.

Each pilot's rank is shown on the **COMPANY INFO, PILOTS & OPS** menu, Pilot Details tab, along with a progress bar below which shows their progress to the next level.
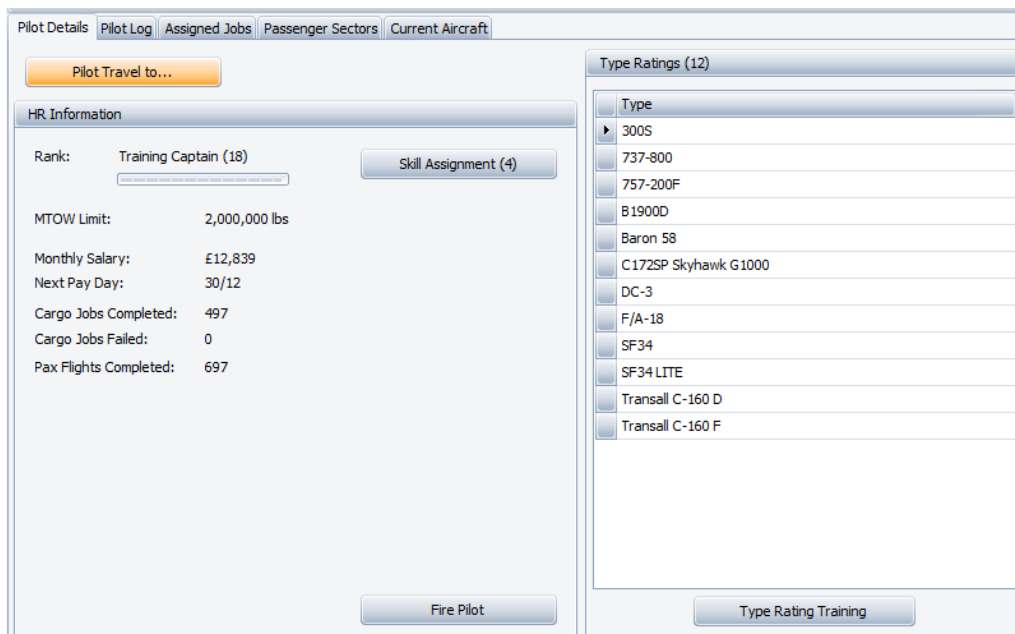
When pilots level up, they are assigned a Skill point to spend on one of the many pilot skills available to them.

Skills are categorized into 5 groups: Maintenance, Cargo Ops, Pax Ops, Maintenance and Trading.

Each of these groups contains 3 or more individual skills which determine how good (or bad) your pilot is at a specific activity. The skills within an activity are tiered, and must be unlocked by the lower level skill. For example, for a group with 5 skills in it, you cannot spend skill points on the 2nd skill in the group until you have at least one point in the first skill.

The number of Skill points available for a pilot are shown on the "Skill Assignment" button for each pilot in the "Pilot Details" tab of the Pilots & Ops screen.
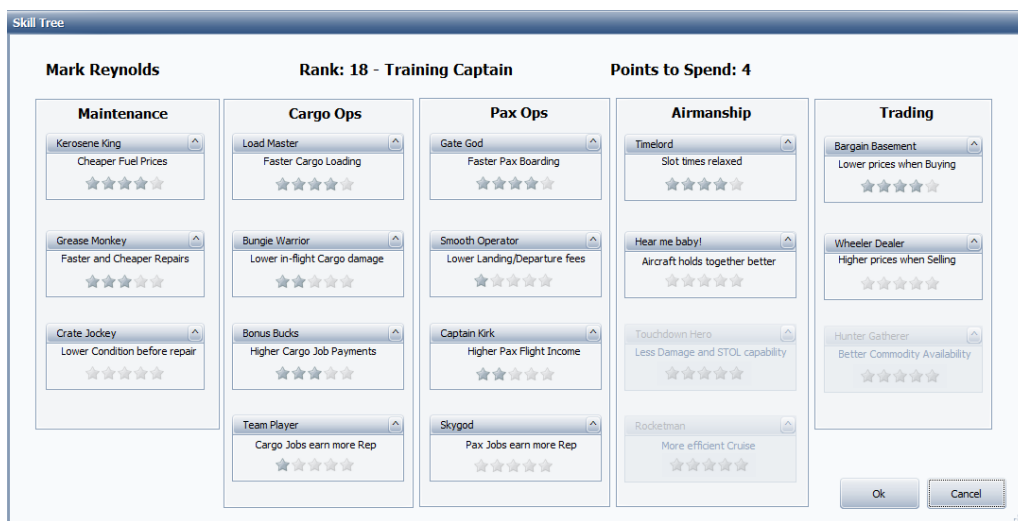
To upgrade a pilot's skill in a particular area, click the up arrow on the skill's section. Once you have allocated all the available skill points to spend, click "Ok" to confirm your selection.

Maintenance Skills

Maintenance Skills are focused on the smooth running, fueling and repair of aircraft.

Kerosene King - the higher the skill, the lower pilots will be charged for fuel for their flights.

Grease Monkey - pilots get lower repair costs.

Crate Jockey - this skill modifies the pilot's propensity for repairing the aircraft - the higher the skill, the lower condition of aircraft they'll tolerate before they repair it.

Cargo Ops Skills

Cargo Skills allow your pilots to load faster, cause less damage to goods on board, and increase their payout and reputation for completing cargo jobs.

Load Master - Allows your AI pilots to spend less time loading cargo.

Bungie Warrior - AI pilots cause less damage to cargo in flight.

Bonus Bucks - Pilots with this skill receive a bonus on cargo job income.

Team Player - Pilots with this skill receive more reputation when they complete jobs

Pax Ops Skills

Looking for the best customer relation skills to make your passenger ops a success? These are the key qualities your pilots need!

Gate God - When flying passenger jobs, pax board the aircraft faster.

Smooth Operator - Pilots benefit from a discount on landing fees and departure fees.

Captain Kirk - Passenger income is increased when this pilot participates in a pax flight.

Skygod - Passenger flights are subject to a small reputation bonus

Airmanship

Every day is a school day in the life of a pilot! Learn to respect your aircraft, and she'll get you home in one piece and make your life easier!

Timelord - Pilots have more leeway on departure/arrival times for their passenger flights.

Hear me baby! - Aircraft receive less damage thanks to the expertise of the crew. (Mynoks not included!)

Touchdown Hero - Pilots with the Touchdown Hero skill take less damage landing, and can operate into shorter runways.

Rocketman - Aircraft cruising speed for AI pilots is increased for shorter flight times

Trading

Looking to score the best deal on your commodity prices? Level up your pilots with trading experience.

Bargin Basement - Pilots receive a discount when purchasing commodities

Wheeler Dealer - Pilots receive a higher prices when selling commodities

Hunter Gatherer - Airports restock faster when purchasing commodities

Cargo Jobs

3 **Cargo Jobs**

In AirHauler 2, you can accept, and fly both Cargo Jobs and Passenger Routes.

There are several ways to choose and select Cargo Jobs from the main menu, and you can also set up passenger schedules from here along with flying one-off single passenger flights ("Ad-Hoc" flights).

Under the **CARGO OPS** menu, you will see the following options:
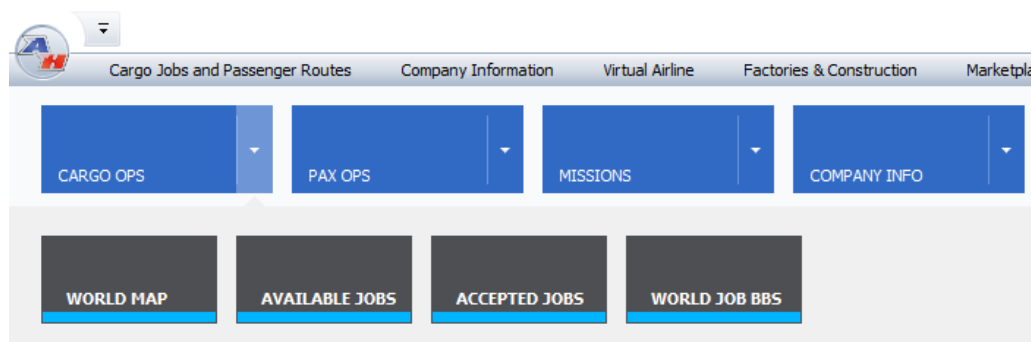
World Map

The overview map shows you all cargo jobs, routes, missions and available services at any particular airport - including commodity trading. On this screen, the selection is by airport - simply click on an airport to view which jobs are available to/from the airport along with other services.

Available Jobs

The Available Jobs screen shows **all** available jobs across all airports, rather than the Overview Map which only shows information from a single airport at any one time. This screen is very useful when planning Cargo Job flights especially if you're looking for return or onward cargoes from any particular location.

Accepted Jobs

The Accepted Jobs screen shows **only accepted** cargo jobs - and will not show available jobs.

Before flying or creating passenger routes/flights - please [read the topic] 75 *regarding how AirHauler 2 uses time and UTC within the simulator!*

World Job BBS

The World Job BBS is a list of available jobs which can be accepted by any AirHauler 2 player or VA from a live online list of available jobs generated continuously.

3.1   The World Map

As you have seen from the previous topics, the **WORLD MAP** can be used to select, accept and assign cargo jobs either to yourself, or your AI Pilots.

The World Map also includes a number of other features and displays information on which services are available from any given airport which you select - whether you have a base or aircraft there, or not.

You can select an airport from the map by clicking on the red or blue dot beside the ICAO code listed for that airport.

You can also right click anywhere on the map to bring up a pop-up menu which will allow you to select airports which are bases, which you have aircraft or pilots currently stationed at, or to search.
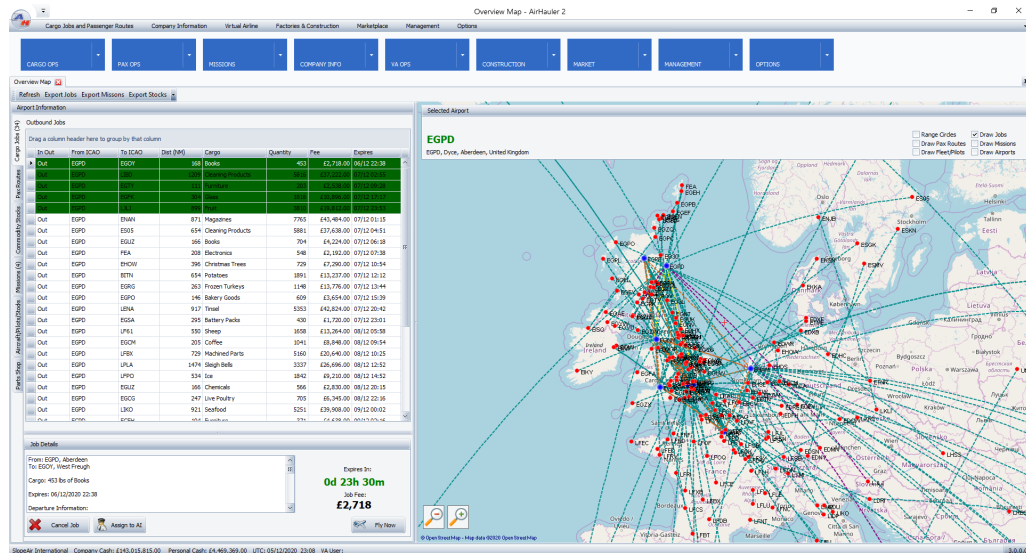
When selecting an airport the Overview map will display information for that airport in the "Selected Airport" area at the top of the Map view. Once selected, the left hand side of the window will display relevant information about the chosen airport. This is arranged in a vertical tab format. The tabs, and sections available are:

Cargo Jobs

This tab shows all available Cargo Jobs which are to, or from this airport. You can "accept" cargo jobs from this tab, and assign them to AI pilots or transfer them to your Virtual Airline, or fly the job yourself.

Pax Routes

The Pax Routes tabs shows any scheduled passenger routes which you have created which depart from, or arrive at this airport. To create a scheduled passenger route (one which repeats on a weekly basis, use the "Pax Ops -> Scheduled Routes" main menu item. For a one-off flight between two airports, use the "Ad-hoc Flight" item.

Commodity Stocks

The commodity stocks tab shows goods available for purchase, or which can be sold, at this aircraft. Note that only larger airports have commodity markets, and at smaller airports this tab may be empty as there is no market present.   Airports which are in the close vacinity of an humanitarian emergency or natural disaster (of which there will be an Aid Mission for), may have their markets suspended for the duration of the emergency - if this is the case, a message will be shown on this tab informing you that the market is currently closed.

Missions

As you travel to other airports, you will meet individuals who may offer you missions to/from that airport. Any available missions at that airport will be shown in this tab. Note that if you have not visited an airport before, there will not be any missions available, however once you have visited either as yourself or an AI pilot, you will be aware of one or more contacts at that airport who can provide missions. Please see the topic on Missions 100 for more details.

Aircraft/Pilots/Stocks

Any aircraft, pilot or commodities which are at the selected airport are shown in this tab to give you a simple overview of resources and assets at this location.

Parts Shop

Larger aircraft can deal in aircraft parts. You can purchase these parts, and ship or fly them to an aircraft construction facility (which you need to construct) in order to assemble new aircraft from the individual parts. This can result in much cheaper aircraft than purchasing directly from the new or used aircraft market, however you do need to find all the relevant parts first before you can construct the aircraft. Keep an eye out for much needed parts as you travel around between different airports.

3.1.1   Viewing Available Cargo Jobs

To view available Cargo Jobs, simply select an airport from the Overview Map.

All available jobs will be listed in the Cargo Jobs tab on the left of the screen. Note that it is not unusual for no jobs to appear if this is an airport you have never been to before.

The list will show if the job is inbound or outbound (i.e. to or from) the selected airport, the departure and arrival airports, the distance between those airports and the cargo item and quantity that needs to be transported. You'll also see the Fee for the job, which you'll be paid on successful completion, and the Expiry date of the job - the date and time by which the goods must be delivered.

Note that the Expiry time is your **local computer time** in the case of Cargo Jobs. (This differs from Passenger jobs, which work on UTC/Zulu time, and Virtual Airline jobs which also use UTC/Zulu).

If you click on any of the jobs in the list, you'll be shown more information in the lower section of the screen under "Job Details". This includes more detail on the departure/arrival airports in the scrollable details box, and the time remaining before the expiry of the job. If the time remaining is shown is in green, the expiry is not yet due. If the time remaining is shown in red then the job is either about to, or has already expired. Be very careful when accepting jobs which have a short time remaining, especially if you are intending on assigning them to AI pilots rather than flying them yourself.

At the bottom of the Window you can choose to accept or assign the cargo job.

Accept Job

Clicking "Accept Job" will accept the job from the customer, and allow you to fly this job for them. They'll place the cargo at the departure airport ready for you to collect and will expect you to complete the job on-time.

Assign to AI

Clicking "Assign to AI" will add this job in to the job queue for a specific AI pilot. If you have not already accepted the job, you'll be prompted to do so. Note that you can assign a job to multiple AI Pilots if necessary.

Fly Now

Choosing "Fly Now" in the Job Details allows *you* to fly the job yourself.

Transfer to VA

If you own, or are a member of a Virtual Airline, you can transfer this job to your Virtual Airline where it can be flown by any of the members. Note that the Expiry Date will be converted from your local time, to UTC when you do this as your VA pilots may be in different real countries around the world, hence UTC is used so the expiry date/time is the same for all VA Pilots regardless of real world location.

Once transferred, the job will appear in the Virtual Airline VA Cargo Jobs list. You can use this function as a VA owner to specifically select and distribute cargo jobs to your VA pilots, and you can also give permission for other VA members to transfer jobs to your VA as required. Once transferred, the job

will be removed from the Cargo Jobs list and appear on your Virtual Airline's job list.

3.1.2   Using AI for Jobs

Rather than fly cargo jobs yourself, you can assign them to your AI pilots. You can assign a job to more than one aircraft/pilots, and they'll be able to assist in getting the job done more quickly. In the same way, you can help your AI pilots with a job simply by loading some of the cargo and flying it yourself.

To assign a job to an AI pilot, click the "Assign to AI" button on the Overview/Available Jobs/Accepted Jobs screen.
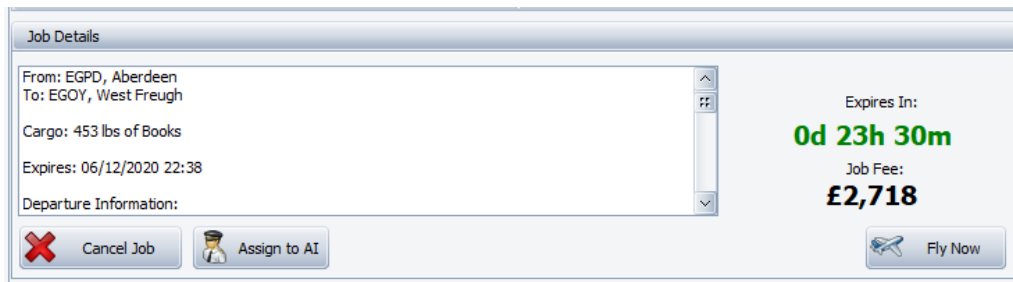
You'll then be prompted for an aircraft to use. If that aircraft has a crew assigned to it already, AirHauler will use the existing assignment, or if there are no assigned crew members, you'll be prompted to assign a pilot and co-pilot to the aircraft.
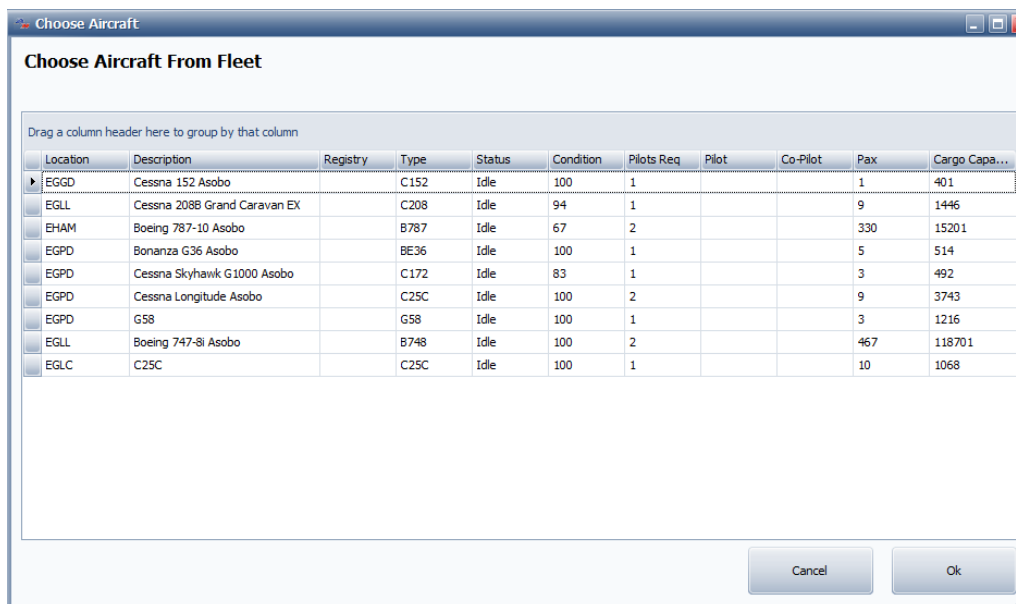
Note that some airfields will be too small for particular aircraft to operate into and out of safely - i.e. you can't land a 747 on a grass strip at a remote airfield. The runway length requirement is based on the MTOW of the aircraft, and some STOL aircraft will have restrictions which are more stringent than in the real world. Unfortunately, as an aircraft being STOL is not represented in the aircraft.cfg, it's not possible for AH2 to identify these effectively. You can however influence the required runway length by giving your pilots the Touchdown Hero skill.

Runway length restrictions apply only to landing aircraft - AI pilots will always be able to depart from an airport in any aircraft. Also note that the restrictions do not apply to you as a pilot.

Once you've assigned the job to the aircraft and pilots, the job will be listed in the Pilots details in the "Pilots & Ops" screen. From here you can Un-assign the job from the pilot should you require to, and they will stop undertaking activities on that job the next time they decide which task to undertake next.

When AI pilots complete jobs, they are recognised as having done so - as they complete jobs, AI pilots will rank up and their base salary will increase, and they'll be awarded skill points to spend. See the chapter on Pilot Skills and Ranks 56 for more details.

3.2   Available Jobs

The **CARGO OPS, AVAILABLE JOBS** menu item shows **all** available jobs across all airports, rather than the Overview Map which only shows information from a single airport at any one time. This screen is very useful when planning Cargo Job flights especially if you're looking for return or onward cargoes from any particular location.
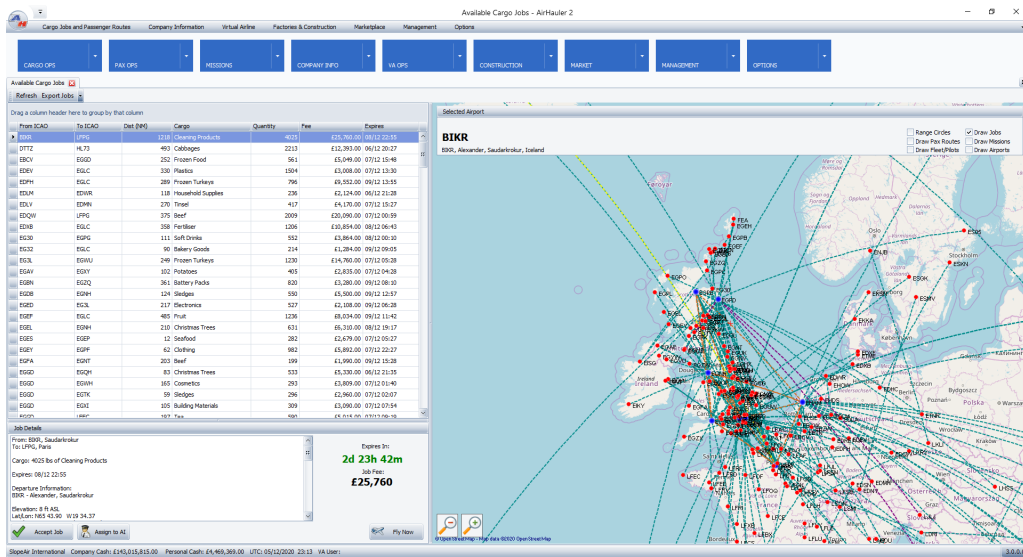
The operation of the Available Jobs screen is identical to the Cargo Jobs tab in the Overview Map. Select the appropriate job from the list, and then choose Accept/Fly or Assign from the Job Details section at the bottom of the window.

3.3   Accepted Jobs

The **CARGO OPS, ACCEPTED JOBS** menu item shows all the cargo jobs which you have accepted, across your entire company.

As with the Available Jobs screen, the function of this screen is identical to the Cargo Jobs tab on the Overview Map, and allows you to fly jobs, assign jobs to your AI Pilots, or to your VA, and cancel the job if necessary.
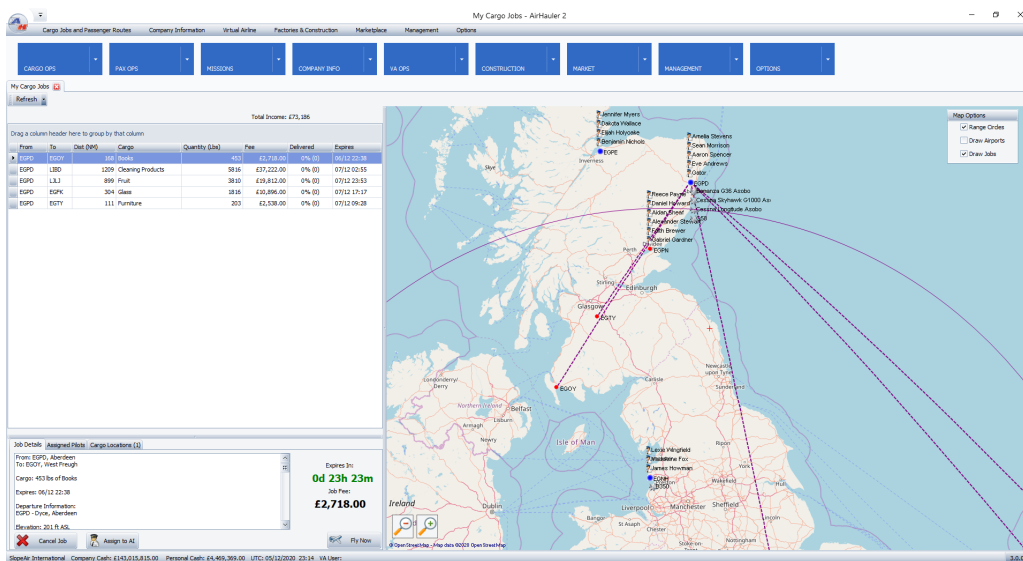
The operation of the Accepted Jobs screen is identical to the Cargo Jobs tab in the Overview Map, with the proviso that the job has already been accepted. Select the appropriate job from the list, and then choose Fly or Assign from the Job Details section at the bottom of the window.
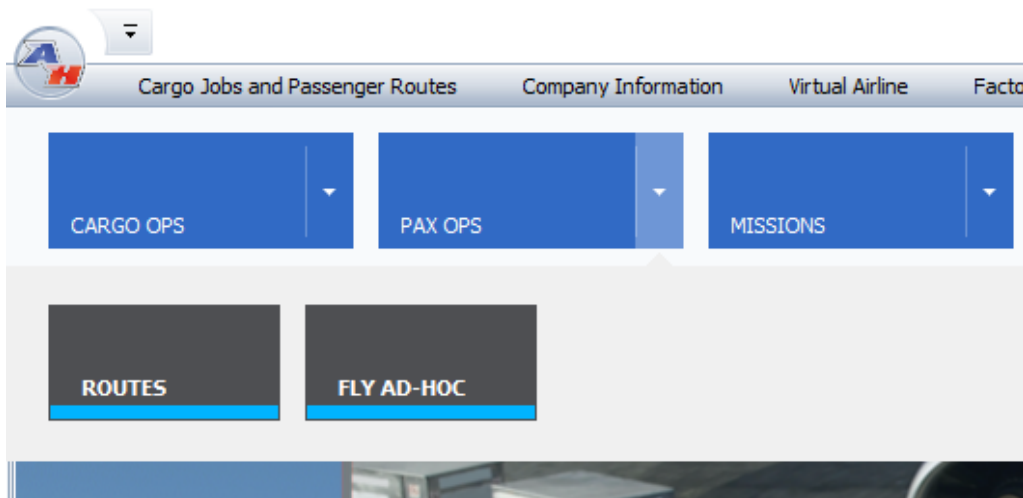
Passenger Flights

4   Passenger Flights

NB: It is important when operating passenger flights that you understand how AirHauler uses time within the simuator, specifically UTC or 'Zulu' time. Please ensure you read the chapter entitled 'A note about time for Pax Ops 75 **'.**

You don't just have to fly cargo in AirHauler - you can fly Self Loading Freight, or *passengers* too!

There are TWO types of passenger flights in AirHauler, apart from special air taxi missions. These are:

- Ad-Hoc Passenger Jobs

- Scheduled Passenger Flights / Routes

Both Ad-Hoc and Route passenger flights can be accessed from the top menu under the **PAX OPS** menu.

Ad-Hoc Passenger jobs allow you to take your aircraft, and fly wherever you want to from wherever the aircraft currently is. You can specify ticket prices, and you can sell tickets to passengers then and there, and then fly the job directly. Only YOU as a pilot can fly Ad-Hoc jobs - AI pilots cannot do them.

Routes are your scheduled passenger operations. You can schedule individual sectors in aircraft, and assign crews to fly those sectors for you (remember they'll need type ratings in the aircraft!). Routes are more structured, and you can still set ticket prices for every sector, however you won't know how many tickets you sold until after the route has been flown. You personally can fly any routes which have not been already flow at ANY

time, but you won't get paid until the proper time that the route is scheduled to depart/arrive.

So - for a flight from the aircraft's CURRENT location to anywhere you want with passengers, departing right now - use the Ad-Hoc flight feature.

To build up your aviation empire with your AI pilots flying routes all over the planet at set times - use the Routes feature.

Aircraft Configuration

To fly passengers, rather than boxes, you'll need an aircraft with seats! Every aircraft in AirHauler is either in a Cargo or Passenger configuration. You can swap between configurations for a small fee from the Fleet screen, and you can change the seating arrangements also between single economy class up to 4 class flights with First, Business, Premium and Economy.

In order to fly a passenger flight you'll need a passenger configured aircraft so ensure you convert a cargo aircraft to passengers, or buy or lease a new aircraft. When you purchase or lease a new aircraft you'll be able to choose if you would like it delivered in a cargo or passenger configuration, and how you want the cabin configured.

4.1   A note about time for Pax Ops

Passenger flights in AirHauler 2, are based on Universal Coordinated Time **ONLY**.

Further more, unlike cargo jobs, all passenger operations in AH2 use the **SIMULATOR TIME & DATE** rather than your local PC's time and date.

As an example, if you have a passenger flight which wants to depart at 06:00 and arrive at 10:00, that is 6am UTC (Zulu) time, and 10am UTC - your own personal timezone, the timezone of the departure/arrival airports, is **irrelevant.**

i.e. if the departure is from Dubai International airport (OMDB), the local time there is UTC+4, so the departure will be at 0600 Zulu, 1000 Local time.

YOU MUST ENSURE THAT THE SIMULATOR IS SET TO THE APPROPRIATE ZULU TIME before undertaking the flight.

If your passengers will start boarding in many thousands of minutes from the in-cockpit message - that's is a sure sign that the date and time in the sim is incorrect.

You **MUST** fly the passenger flight at the appropriate UTC departure time and date. That is when they want to depart, and similarly, they want to arrive at a particular time.

When living in a country with a UTC Offset as your normal time zone - for example, on the East Coast of the USA, in Florida (UTC -5) - you must take this into account when scheduling passenger operations.

i.e. if you want the flight to depart at 10:00am local time, you must schedule it for 15:00 UTC.

You must also be aware of date changes with timezone offsets - using Dubai as an exampl again: 02:00 on the 3rd December in Dubai LOCAL TIME, is really 10:00 on the **2nd December** in UTC time.

This may seem very annoying to the casual user, however you should note that this is actually how flights are planned and operated in the real world. UTC is used as the time for all commercial airline operations, and if you're on a passenger flight, you can be assured that the pilots up at the pointy end know what the UTC current time is. Using UTC means that AH2 does not have to account for local time changes, daylight savings rules and other abberations, as the whole point of UTC is that it is a universal time which can be used by anyone on planet Earth as a common frame of reference. So although it may seem irritating, you're actually doing it properly ;)

IN SHORT - ALL TIMES FOR PASSENGER OPS IN AH2 are in UTC/ZULU (Universal Coordinated Time). ENSURE YOU ONLY USE UTC WHEN SCHEDULING, FLYING and SETTING THE SIM UP!!!!

## 4.2   Scheduled Passenger Flights

Routes are your scheduled passenger operations. You can schedule individual sectors in aircraft, and assign crews to fly those sectors for you (remember they'll need type ratings in the aircraft!).

Routes, sectors and crews (PAX OPS > ROUTES)

The "Routes" screen is where we set up our individual passenger flights which will make up our schedule. These individual flights are called "Sectors", and you need crews to fly them (unless you're going to fly them yourself of

course). The schedule is weekly, and scheduling a flight on a Tuesday for example, means that this flight will be performed every Tuesday until you remove or change the sector.
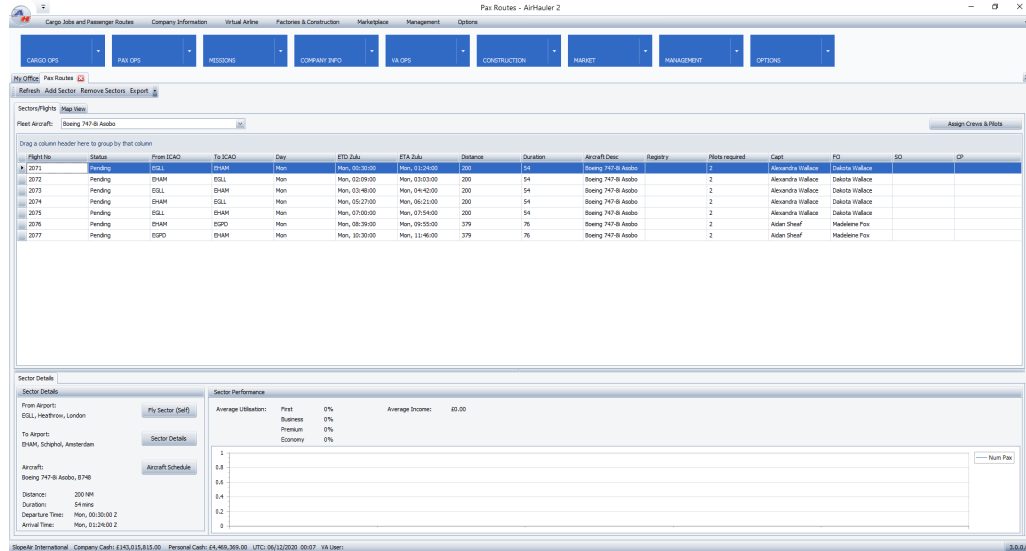

To schedule a sector, click the "Add Sector" button in the toolbar of the Routes Screen. You'll be asked to select an aircraft for the flight from your fleet of passenger aircraft.

You'll then be asked for your destination airport. The sector will start wherever the aircraft arrived at the end of the last sector.

Sequences must follow each other in this fashion.   So if you schedule a sector from Aberdeen (EGPD) to Heathrow (EGLL), the next sector will start from Heathrow. If for some reason (i.e. deleting a sector from a schedule) the sequence isn't maintained, AirHauler will warn you by colouring the invalid sector Red and set the status to "Sequence" to show that it is out of sequence.

Sectors also need to be flown, either by yourself or by crews, and you will need to assign one or more crews, of one of more pilots to your aircraft - we'll come on to that later.

Once you've chosen your destination you'll see the Sector Details Screen - this is the same as the Ad-Hoc Pax flight setup screen you've used previously, with several differences. You can change the departure time of the sector to any future time after the previous sector, with a short delay for the turnaround (cleaning/crew changes etc).
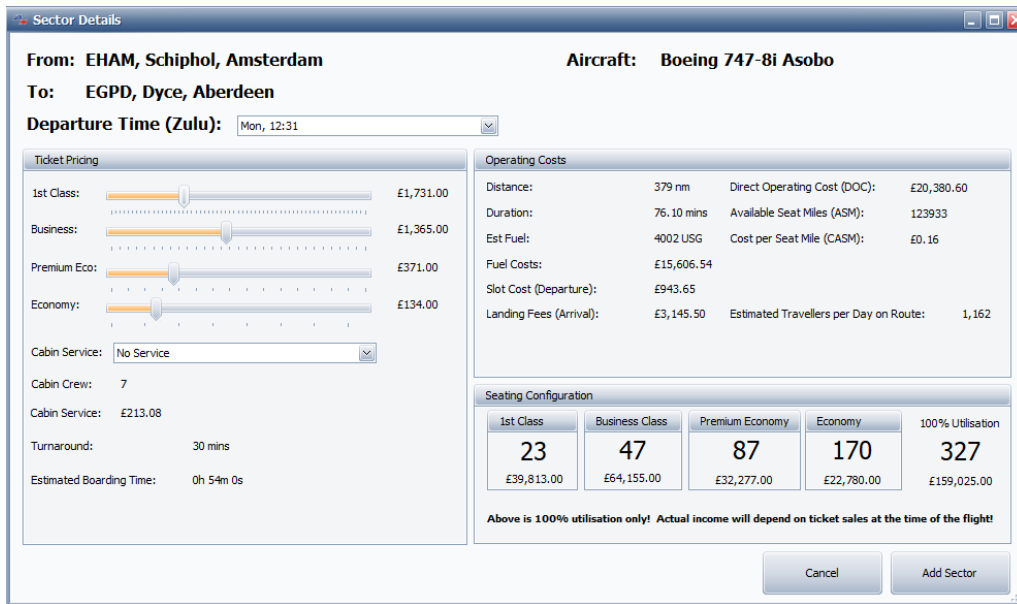
The Ticket price sliders work in the same way as the Ad-Hoc passenger screen **HOWEVER** the Totals and income section at the bottom right show the income **FOR 100% UTILISATION ONLY!**

You will not know how many tickets you have sold for any particular sector until that sector has been flow, at which point you can review the pricing/performance of the sector and lower or raise prices as necessary. This is different from Ad-hoc passenger flights where you see LIVE sales before you fly.

Scheduled flights will **NOT** be flown if they are initially scheduled on the day of departure. If you schedule a flight to fly tomorrow or later, it will be flown as normal, but if you schedule a flight on a Wednesday to go later that day, it will be **NEXT** Wednesday before the flight is processed (unless you fly it manually). This is by design to prevent scheduling then canceling flights immediately - after all, the passengers need time to buy tickets!

NEWLY CREATED SECTORS WILL NOT BE FLOWN UNTIL 48 HOURS AFTER CREATION. If it is Monday in the real world, and you create a new sector for a Tuesday, it will be the NEXT Tuesday before it flies.

To add the Sector to the Schedule, click "Add Sector".

Crewing Requierments
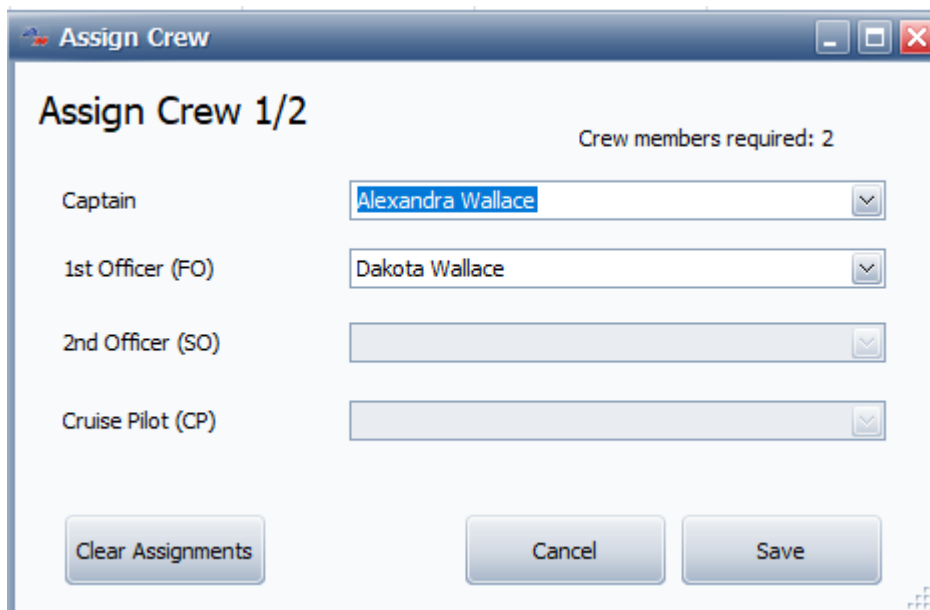
Once the sector is added, AirHauler will then review the crewing requirements and determine how many crew you will need to allow you to operate the schedule.

You will need one or more pilots to crew each sector. Those pilots are the "crew" and will be assigned to that aircraft full time (i.e. unavailable for Cargo or other jobs), so ensure you utilise them effectively.

Crews have duty hours, and flights of longer durations will need more crew to operate them up to a maximum of 4. A short flight of 1 hour duration in a 737 for example will need 2 pilots as part of one crew. If the flight is over 7 hours, they would require a 3rd pilot to allow for rest periods, and for flights over 17 hours, 4 pilots.

Duty hours start at wheels up on the first flight of the day (on a weekly cycle from Monday to Sunday), and then last for 8 hours from that point. The pilots must then rest for the next 16 hours to recover. i.e. if you have a crew who fly their first flight on Monday at 0900Z, their duty day ends at 1700Z - they can fly any flights during that period with no rest breaks. However, if the next flight would depart or land after 1700Z, another crew will be required to operate that flight. The original crew will be unavailable from 1700Z to 0900Z on Tuesday while they rest overnight.

If a crew undertakes a long haul flight, and the aircraft is scheduled to return shortly after, that crew will likely be out of hours to make the return flight. In this scenario, you will require a second crew to perform the next sector. Ensure that you have enough Type Rated pilots on your staff to allow you to complete the schedule!

To assign crew - select the pilots from the drop down lists as required. Slots which are greyed out do not need to be filled, and existing pilots can be left assigned if they are already in place. The "Assign Crew 1/1" in the top left of the window will inform you how many Crews you require, and the "crew members required" will show you how many pilots you require for each of those crews.

If you do not have enough pilots available, you can cancel out of Crew Assignment but beware that if there are no pilots to fly sectors, those sectors will **NOT** be operated and you'll incur a reputation penalty for each one which does not fly! Sectors which do not have sufficient crew assigned will be marked red and with "No Crew" as a status.

Processing the Schedule and Flying Jobs

As time passes, your AI pilots will fly the sectors allocated to them. Flights which have not yet been flown this week are marked as Pending. Flights which have been recently completed are marked as "Completed" (and green), and will return to pending after 2 days.

You can manually fly any flight marked as "Pending", provided you are type rated in the aircraft. When you do, the flight proceeds in the same way as an Ad-Hoc job and your performance is recorded.

You are not paid immediately for the flight however. The flight will be marked as "Flown", as it has already been completed, and you will be paid after the point at which the flight would have been performed by your AI pilots (if any) but it will be processed using your performance. In this way, you can set up an entire week schedule and fly it yourself in one or two days, then wait for them to process through so you can fly them again as convenient.

"Flown" flights will reset to pending after a day or so in the same way as "Completed" flights by AI pilots.

4.2.1   Working with Routes

You can add/edit and duplicate routes in a variety of ways.

Adding Routes

To add a new route sector to your schedule, you can do one of several operations:

If you click "Add Sector" from the top toolbar, you will be prompted to choose a passenger aircraft, a destination and then presented with the Sector

Details screen to configure the flight. Note that when using the Add Sector toolbar button the route is ALWAYS added AFTER the last route sector for that aircraft - i.e. you can only add FORWARD in time from the last flight.
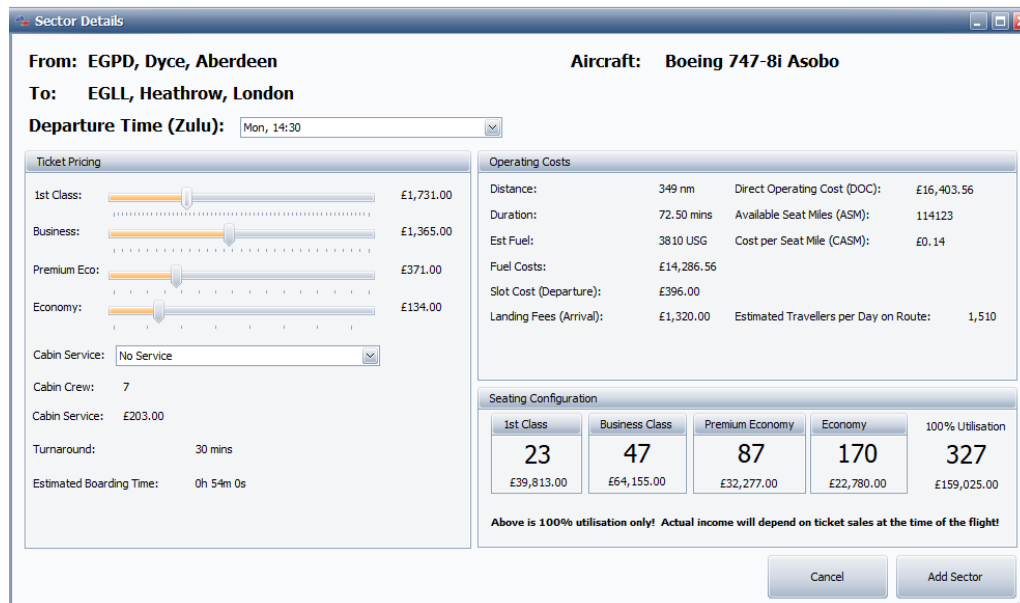
To add a flight before or after an existing sector, select the sector in the grid, then right click and choose "Add Before", or "Add After" from the pop-up menu. These functions let you schedule the new sector before or after the chosen sector as appropriate - remember that sectors must always "flow" (i.e. the arrival airport of the previous sector must be the departure airport of the next sector), so you may have to add additional sectors to ensure that your aircraft is in the appropriate place to fly the flight. If you don't, you'll get a sequence error in the sector's Status column on the grid.

Routes must be scheduled on a weekly basis from Monday to Sunday. It is not possible to schedule a flight which straddles the Sunday night/Monday morning boundary - i.e. all sectors must last arrive before 23:39Z Sunday/0000Z on Monday.

Modifying a Route sector

To modify the route sector, select "Sector Details" from the right click menu. You can change the day, time and ticket pricing for the route from this screen, and click "Update Sector" when finished. Note that you cannot adjust the departure/arrival airports in this manner - to do so, you should remove the route and add a new route with the appropriate airports set.

Copying Route sectors between days

You can copy an entire day's routes, or just an individual route to one or more other days. To do so, select either the individual route you wish to copy, or a route on the appropriate day for the appropriate aircraft. Right click on the route then select either "Copy Sector to other Days(s)" or "Copy Day to other(s)".

You'll then be presented with a screen where you can tick the appropriate days which you'd like the route sector(s) copied to.

Note that if you are copying the entire day's sectors, any existing sectors for that aircraft on the target days will be deleted to avoid conflicts. When copying an individual sector, nothing will be deleted, so be sure to watch for conflicts with existing route sectors. They should be obvious as it will generate a "Sequence" issue as the departure and arrival points will not flow as required.

Once you have copied your sectors, ensure you click "Assign Crews & Pilots" in the top right of the Passenger Routes screen to assign crew, otherwise your pilots will not be assigned, and the flights will not fly!

Sector "Status"

Sectors have different statuses depending on what has happened with that sector, and if it is assigned correctly.

The statuses are:

Pending - The sector is ready to be flown by the AI pilots, and everything is correctly assigned to allow this sector to be flown at the appopropriate time.

In-Flight - The sector is currently being flown by your AI pilots

Completed - The sector has been flown, and completed by your AI pilots. After a day or so, the status will return to Pending ready for the next flight of this sector the week after.

Flown   - You have personally flown this sector ahead of it's scheduled departure. Your flight data will be used to "fly" the flight, and you'll be paid when the scheduled arrival has passed as if AI pilots had conducted the flight. The status will then change to Completed as normal.

No Crew   - There are no crew (or not enough crew) assigned to this flight, and it will NOT be flown. You will incurr a reputation penalty for each cancelled instance of this flight if no crew are assigned to it. Note that it is not necessary to assign crew to a flight which you want to "Fly Self", but it is highly recommended in case you are not able to fly the flight during the week in which case you will incurr a reputation penalty as described previously. Use the "Assign Crews & Pilots" button (or Assign Crew from the right click menu) to assign crews to aircraft and routes.

Sequence   - The departure airport does NOT match with the arrival airport of the previous sector. Flights MUST depart from the previous arrival airport in all cases. You will incurr a reputation penalty for any flights which are canceled due to sequencing, so please ensure that it is correct.

4.3   Ad-Hoc Passenger Flights

Ad-Hoc Passenger jobs allow you to take your aircraft, and fly wherever you want to from wherever the aircraft currently is. You can specify ticket prices, and you can sell tickets to passengers then and there, and then fly the job directly. Only YOU as a pilot can fly Ad-Hoc jobs - AI pilots cannot do them.

Setting up an Ad-hoc passenger flight

To set up an Ad-hoc passenger flight, click the **PAX OPS, FLY AD-HOC** menu button from the Top Menu.
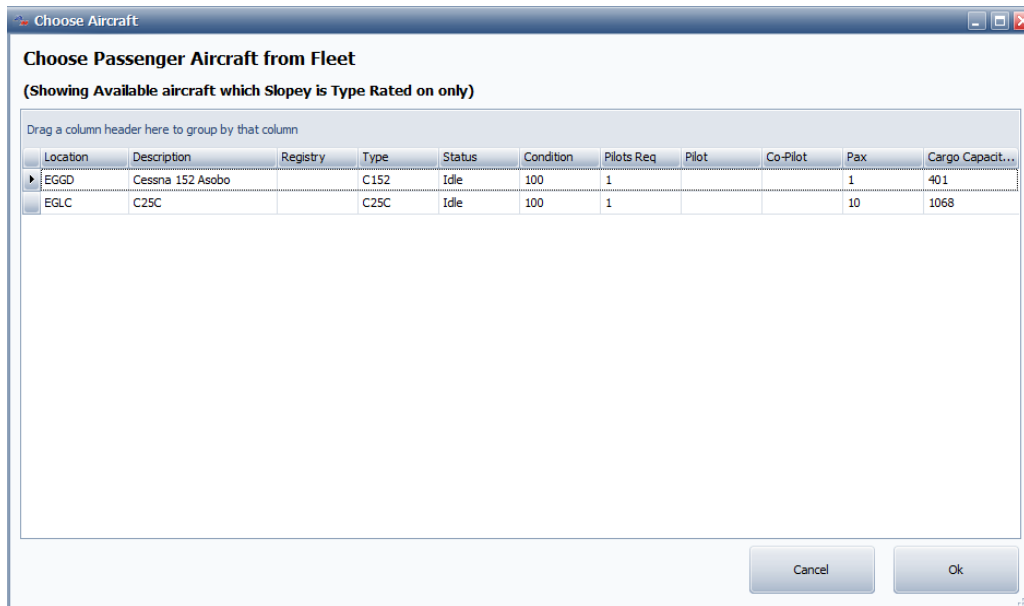
You'll be asked to choose an aircraft from your fleet - only Passenger aircraft and those which you are type rated on will be shown. Also, any aircraft which are currently in-flight on other routes will not be shown.

Click on an aircraft in the list to highlight it and then click "Ok".

AirHauler will tell you where your aircraft is currently located, and ask you to pick a destination for the Ad-hoc flight.

Choose an airport to be your destination using the filters on the next screen.
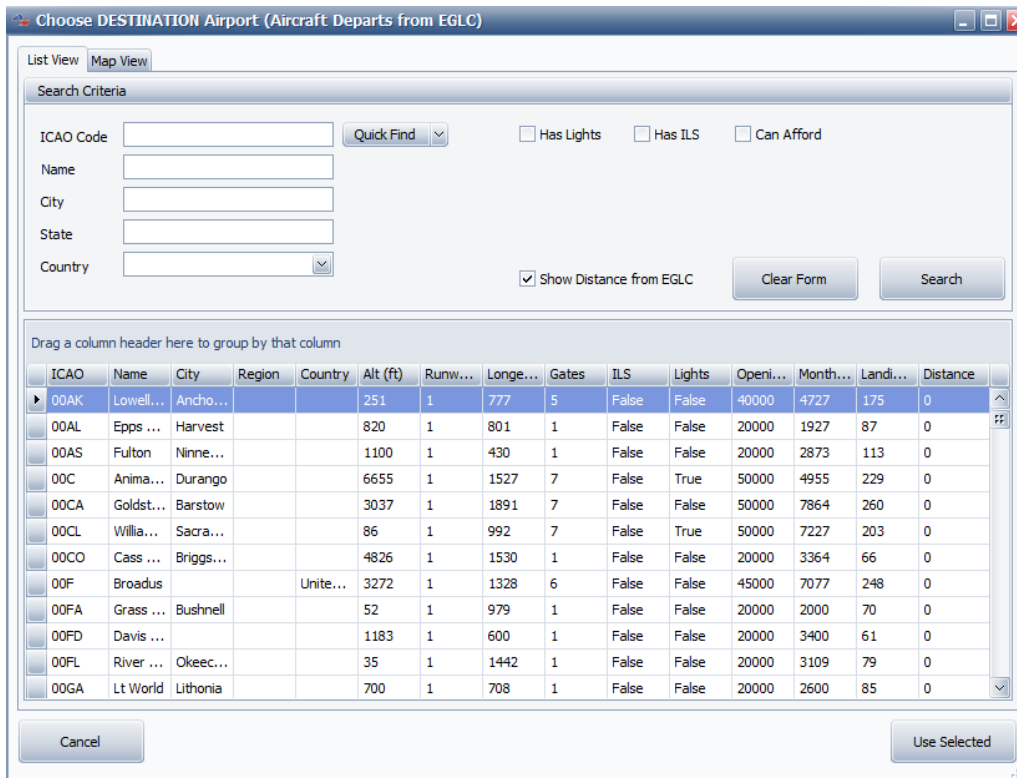
Ticket Pricing and Income

Once you have a destination, you'll see the Ad-Hoc pricing information screen. This screen shows you your departure and destination airports, the time of the flight, the day (which is locked to real time, but not the actual time of day - you can set that as you wish), and the pricing information for the flight.
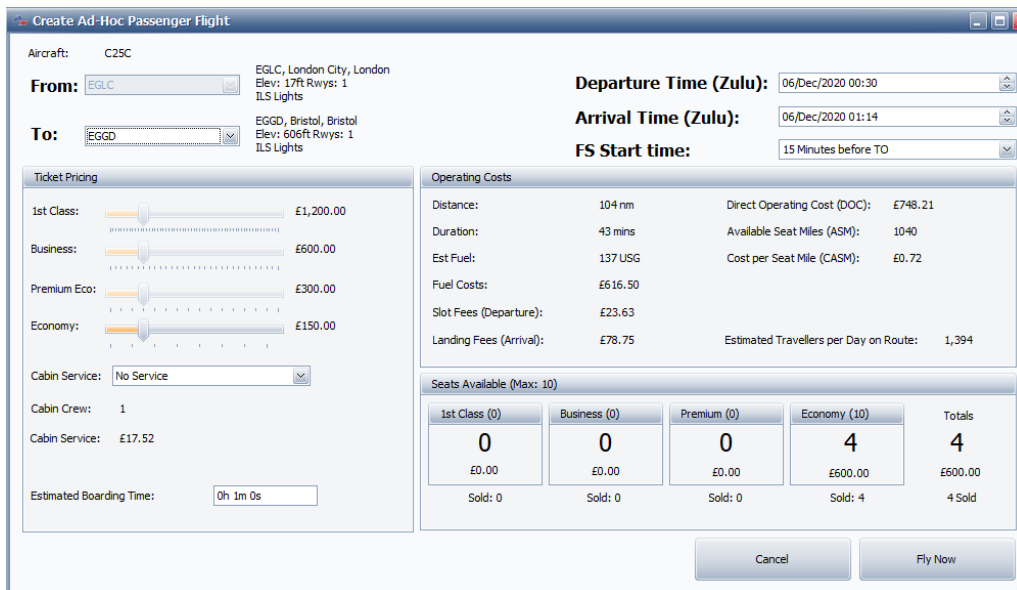
On the left you can see the Ticket Pricing section which contains sliders for pricing for each class of seat you have onboard the aircraft.

You can adjust these sliders as you wish - as you do, you'll see the ticket sales in the "Seats Available" section on the lower right of the window for each ticket class. At the end, under the "Totals" heading you'll see the total number of sales for this flight, and the income it'll generate.

By moving the pricing sliders, you'll be able to find the best income for your flight for the given day and time - the most income doesn't necessarily equate to the most seats sold!

The Operating Costs section shows you information about the flight you're about to undertake - the anticipated fuel costs, departure and landing fees, and other information. The "Direct Operating Cost" gives you an estimate of how much this flight will cost to undertake, so ensure you've sold enough tickets to exceed that cost!

You can also select the type of Cabin Service on the flight - from a simple purchase service, through to haute cusine. The better the on-board service, the happier the passengers!

When you're happy with your ticket pricing for the flight, click Fly Now!

Flying the Passenger Flight

Flying the Passenger route is very similar to flying Cargo flights in AirHauler with a few noticeable differences.

Firstly - passengers take time to board. While boarding is in progress, aircraft engines must remain **OFF**.

Once you've boarded all the passengers, you can start-up and taxi in the normal fashion. The cabin crew safety announcement will play during the Taxi phase, and once you've lined up and departed, you are free to fly to your destination as normal.

Note that rough handling will make passengers nervous or scared and their "Satisfaction" will drop as a result. A late departure from an airport will lower their satisfaction, as will a very early arrival, so try and meet the departure and arrival times as closely as possible.

As you're a pilot, you don't need to feed or water the passengers - your cabin crew will look after that for you.

You can use the in-flight menu to check on your passenger's Satisfaction and Comfort at any point with Ctrl+F1 as usual, however if you scare them, they will let you know via the a pop-up while you're flying!

When you reach your destination, land (hopefully) smoothly, then as normal, shutdown the aircraft, and the passengers will disembark. Once that process is completed, you can shutdown MFS and Alt-Tab back to AirHauler where you'll be paid for the flight.

If your passengers are unsatisfied with the flight, they will demand a refund, and you'll gain a negative reputation as a dangerous outfit! It goes without saying that crashing an aircraft full of passengers is unlikely to do your reputation any good, so please try to avoid that!

Flying Cargo and Passenger Flights

5   Flying Cargo and Passenger Flights

Regardless of the type of job you are undertaking, whether it's a cargo job, a passenger flight, or a mission, the process to fly the aircraft in AirHauler 2 is the same. This is also true for flights where you only wish to position the aircraft and fly it without any assigned job or passengers.

➢ **Cargo Jobs**

To fly a cargo Job, click the "Fly Now" button on the **WORLD MAP**, Cargo Jobs tab, or on the Available Jobs or ACcepted Jobs screen after selecting the job you wish to fly.

If you haven't already accepted the job (it's not green in the list for example), you'll be asked if you want to accept it (say "Yes" as we do), and then you'll be asked to choose an aircraft from your fleet. Select the appropriate aircraft for this job and you'll be taken to the Cargo Loading screen.

As before in the type rating test, you may want to load or offload fuel from this screen, but more importantly we want to load cargo.

Cargo capacity = MTOW - Empty Weight - Fuel On Board

Note that the amount of cargo you can load depends on the max weight that the aircraft is rated for, minus the weight of the airframe and any fuel onboard. So if you need to load more fuel, take less cargo. If you need to load more cargo, you may need to offload or take less fuel - obviously ensure you take enough fuel to get to your destination however!

➢ **Passenger Flights**

To fly passenger flights, click the "Fly Now" button on either the Ad-Hoc passenger flight window, or by selecting a passenger route from the Routes page, and selecting "Fly Sector (Self)" from the Sector Details pane for the selected route.

Note that you can also load Cargo when flying passengers, provided there is additional weight available.

➢ **Positioning Flights**

To fly an aircraft without a cargo or passenger job, simply select "Fly Now (Self)" from the Aircraft's details section in the Fleet screen, or the Personal Info screen and the Personal Fleet tab.

Loading Cargo and Fuel

To load cargo on-board your aircraft, select the cargo item from the "Available to Load" list, and click the "Load > " button. If there is not enough space to load all the cargo, you'll be informed and asked if you want to load the largest possible amount. In that scenario you would need to make two trips to complete that job (or use another aircraft to take the rest!).
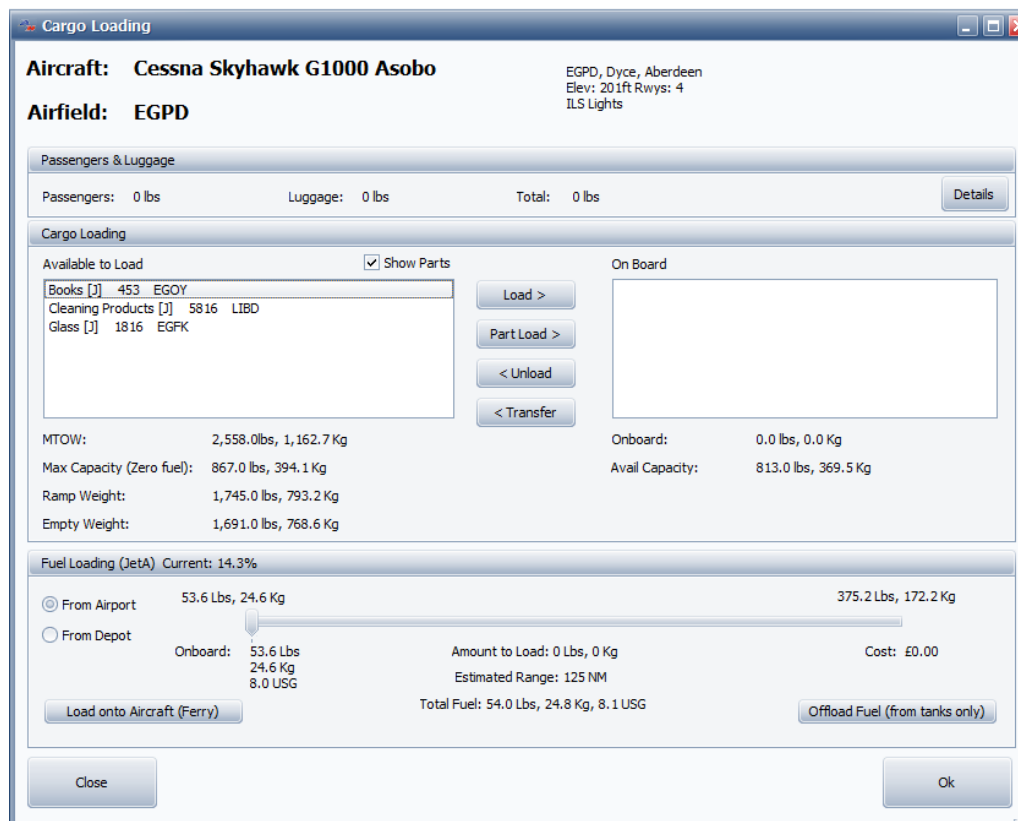
You can unload the cargo also using the "< Unload" button - note you can only unload cargo to one of your base locations, or to the start or end point of the cargo job. If you unload cargo at an airport which is isn't destined for, or which you have a Base and storage facility at, you'll be asked if you want to transport it by road. Note that road transportation can be slow and expensive, but useful if you are on a tight schedule and have been diverted due to weather or maintenance.

Once you've loaded cargo, click on "Ok" to proceed.

Flight Planning

You'll now see the Flight Planning screen. AirHauler will have already created a direct route from your start airport to the destination. You can modify this route if you wish and you can toggle on and off the visibility of VORs/NDBs and Waypoints. To make your own route, click "Clear route" then simply click on navaids to build the route. To finish the route, use the "Direct to " button in the bottom left to take you from your last navaid to your destination. To remove a waypoint, right click on the waypoint in the list on the right hand side, and select "Remove Waypoint".
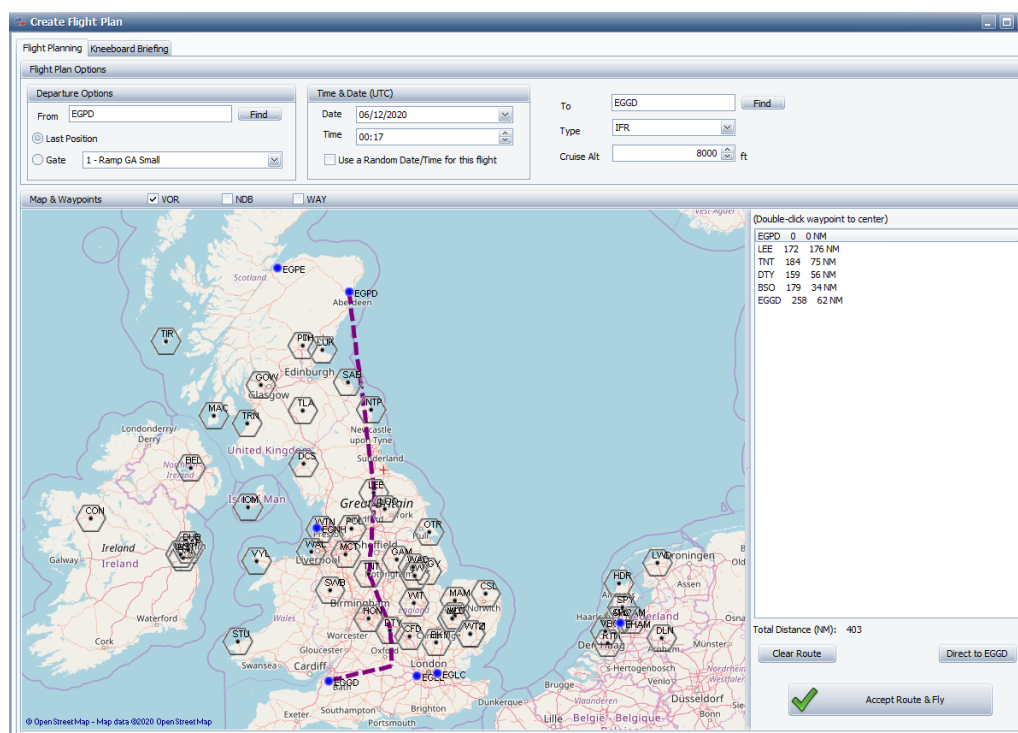
Selecting the VOR, NDB or WAY checkboxed above the map toggles the visibility of VOR beacons, NDB beacons and GPS Waypoints respectively. To build a route between these points, simply click them in turn to build up your desired route. You can clear the route back to the departure airport using the "Clear Route" button, and also add in a Direct leg with the "Direct to" which will always plot a direct GPS route to the destination airport.

You can also specify if the flight plan is to be IFR or VFR, and the default cruising altitude for the aircraft.

You have the option of AirHauler 2 placing your aircraft at the last position at which you shut down, or you can elect to start at a specific gate if you'd prefer (provided gates exist at that airport). You can also vary the time and date of the flight - **however,** remember that for scheduled passenger flights and air taxi/charter missions, the flight **MUST depart at or near to the**

specified ETD, and arrive around the ETA - UTC time otherwise the passengers will not be pleased!

Flying The Aircraft

You'll now be prompted to start Microsoft Flight Simulator with the aircraft in the required position, and also with the appropriate weights and fuel loaded - **ENSURE YOU SET THE TIME CORRECTLY** if you are flying a passenger flight - if AirHauler 2 informs you that the passengers will begin boarding in thousands of minutes, rather than just within the hours/minutes, that is a sure indicator that the **DATE OR TIME** is set incorrectly! Once you have the sim configured and ready to go, and you're in the cockpit on the simulator, click the "Ok" button back on AirHauler 2 to allow it to connect to the sim.

As with the Type Rating flight, you simply need to start-up, Taxi and take off. Once you have taken off, you'll be asked to fly en-route to your destination. You can fly any way that you want, and can stop at other airports, take on other jobs etc.

Remember and not stall or overspeed the aircraft, pay attention to flap and gear limiting speeds, and land smoothly at your destination.

Once you have landed, shut down your engines, and then Alt-Tab back to AirHauler or simply close MFS or return to the MFS Main Menu.

From the Flight Monitoring window, click "Cargo/Fuel Loading/Unloading".
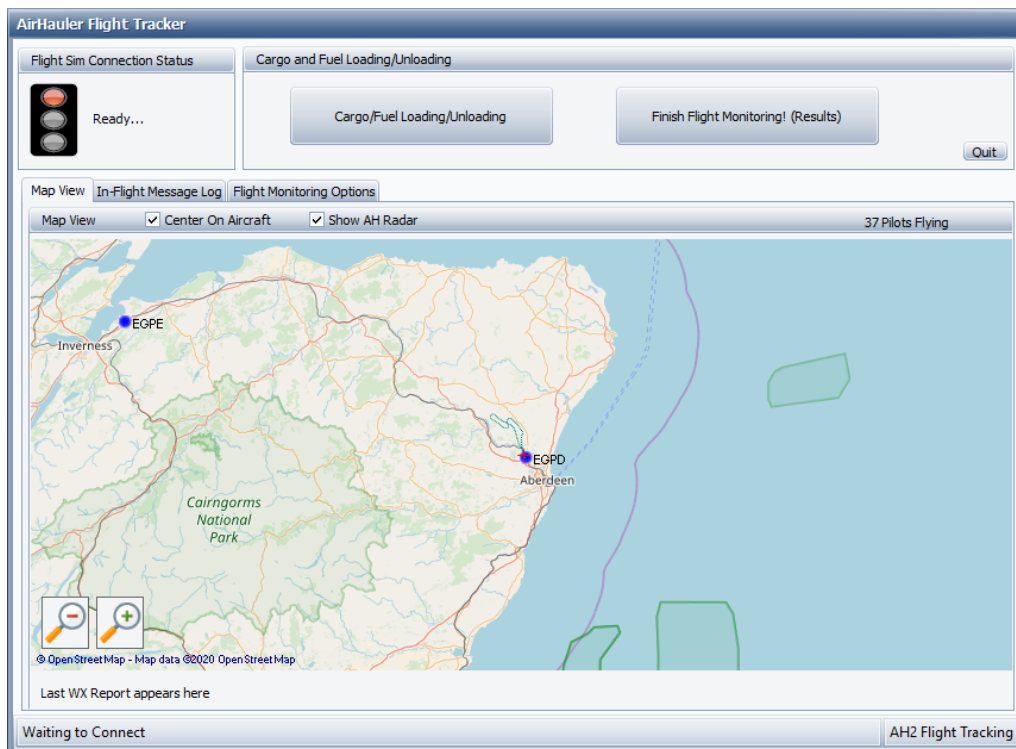
You'll then see the Cargo loading screen and this time you can select your on-board cargo item for this airport and click "< Unload". Passengers will disembark automatically at their destination when you shut down the engines.

If you managed to take all the Cargo, you will complete the job (provided you unload before the job expires!), and you'll receive Cargo reputation and the Fee for this job into your Company bank account!

All that is left to do is to "Finish Flight Monitoring", review your flight performance details, and then go back to the main AirHauler screen.

You can now go back to the**WOLD MAP** or **WORLD JOB BBS** and look for another job at this airport or in the near vicinity and work on growing your empire!

Congratulations on a flight done!!! (hopefully!) And if you failed this job, then dust yourself off, and try again with another one!

5.1   Flight Tracking and Options

While you are flying the flight in the simulator, AirHauler 2 will track your flight with the AirHauler Flight Tracker window.
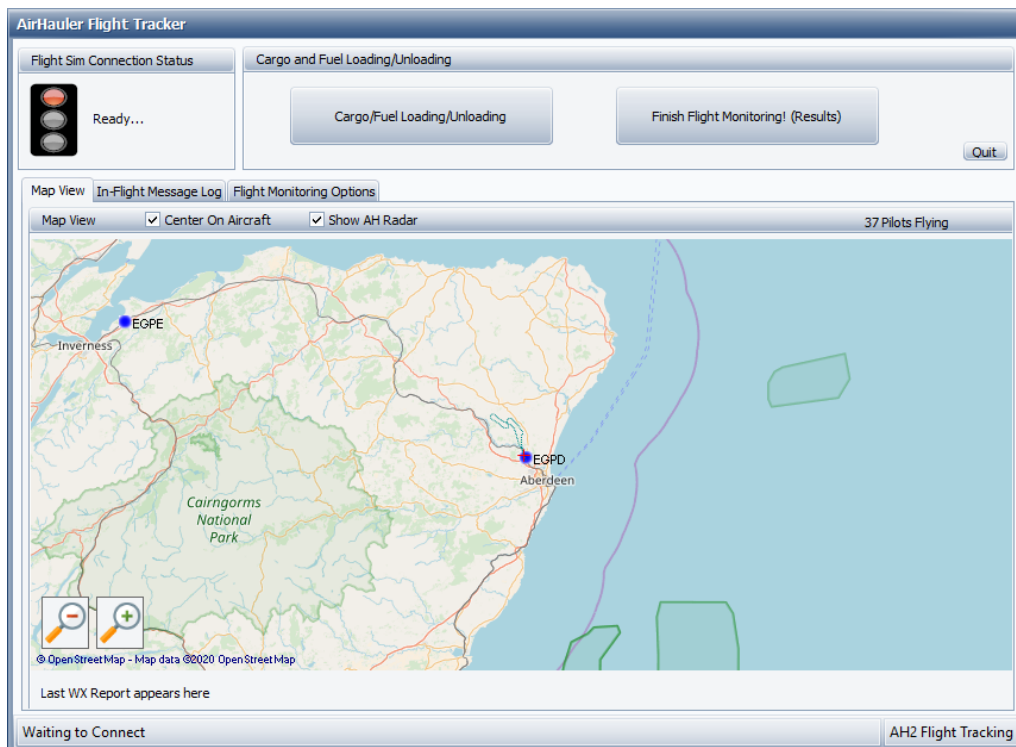
Note that this window cannot be minimised and will be shown for the entire duration of the flight, during which time you cannot access the other screens in AirHauler 2. This is to ensure that the flight is tracked correctly, and that the tracking window is not inadvertently left running between flights.

The flight tracking window shows the status of the connection to MFS as a traffic light indicator under the "Flight Sim Status" section. If AirHauler 2 becomes disconnected from MFS as the simulator has crashed, exited or experience an issue, this will a red indicator and a warning noise will be played. When connected, the traffic light indicator will be green.

The buttons to the right of the status indicator allow you to load or unload cargo or fuel, and to end the flight. Note that these options are unavailable while the engines are running in the simulator - you cannot load passengers or cargo with the engines running!

When you have completed the flight and shutdown the engines in the simulator, click on the "Finish Flight Monitoring! (Results)" button to end the tracking of the flight, and for AirHauler 2 to display performance information regarding your flight, and if you were carrying passengers, information on their satisfaction with the flight. It is recommended you review this information after each flight so you can see if any issues occurred or if you are unsure why AirHauler 2 has penalised you - any damage, reputation

deduction or passenger satisfaction deduction will be listed in the logs for review.

Map View

The lower section of the screen shows the standard map view which is a moving map which will show your location as you fly the flight along with a breadcrumb trail of your flight path.
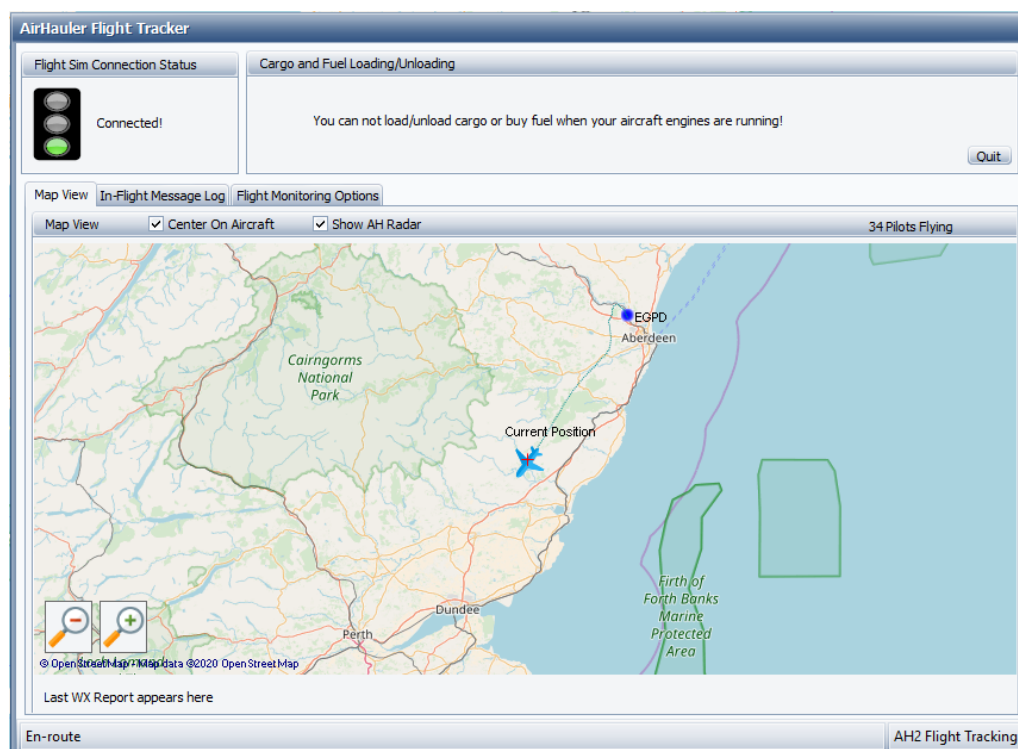
You can use the checkboxes above the map to toggle the map centering on the aircraft as you fly, and also to show other pilots flying in the vicinity (the "AH Radar"). The number of currently flying pilots around the globe is shown in the top right also.

In-Flight Message Log

 the in-flight message log shows all the messages with AirHauler 2 has displayed to you while you conduct the flight. These messages are shown in the sim as standard "mission text" entries, and by default, appear in a green bar in the top of the simulator window. This log provides a simple way to review these messages throughout the entire flight (as the in-sim messages only last for around 10 seconds before they are hidden).
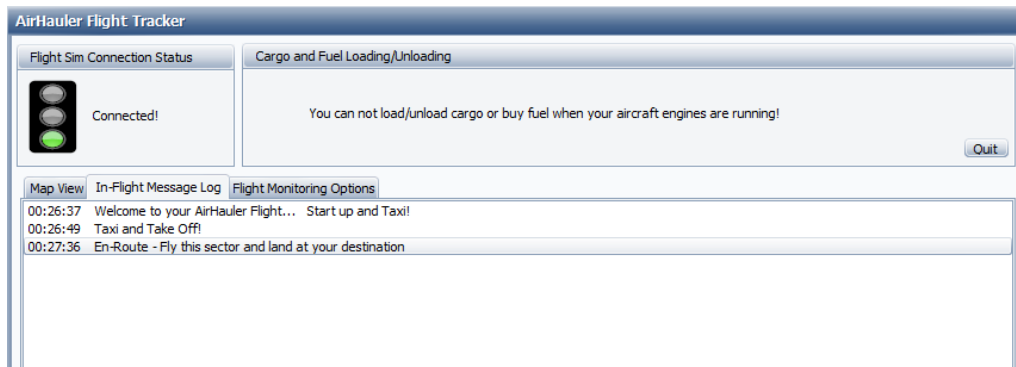
Flight Monitoring Options

The flight monitoring options tab contains several optional features which you can use during the flight.

- Auto Pause

You can specify an airport (by ICAO code), and a distance at which you want AirHauler 2 to automatically pause the simulator for you. This can be useful during a long flight where you do not want to monitor the sim during the cruise but do want to fly the approach and landing manually. You can set the distance to around 30 miles for example from your destination, and AH2 will pause MFS when the aircraft is within 30 miles allowing you to un-pause and continue the flight when you wish.

Missions

6   Missions

As you travel around between airports, you'll encounter individuals at those airports who have missions available for you to complete.

The number of these individuals (or NPCs - "Non Player Characters") depends on your overall company reputation. For airports at which you have a base, you should always have at least one NPC at that airport.

There are several types of missions, all with different completion criteria.

NPCs have their own reputation level with your company, and the more missions you complete for a particular individual, the better missions you'll be offered as a result. Failing a mission will likewise reduce your reputation with that individual.

Available mission types are:

Courier Missions
Courier missions revolve around taking something to another airport, sometimes with a time limit. It may be a commodity item, or courier mail, or it may be an urgently required transplant organ!

Air Taxi
Air Taxi missions are small passenger ops such as experience flights for indiviudals, or moving high net-worth CEOs between work locations.

Charter Operations
Charter Ops are passenger missions for larger numbers of passengers than Air Taxi missions - these could be groups of people going on holiday, or a special flight to a particular location for a specific reason.

Commodity Supply Missions
If an airport has run out of a particular commodity, or doesn't trade in that commodity, you may find missions from individuals looking to acquire a supply of that particular good. These are "Supply" missions. To fulfill these missions, deliver the required commodity to the airport and then from the Mission tab on the Overview Map, or from the Accepted Missions screen you can "Supply Goods" to that mission individual using the button. Note that you must supply commodities via this method - simply selling the commodity at the airport does not count towards mission progress.

Photo/Observation Missions
For these missions you need to fly to a particular location, at a certain altitude, and your passenger will take photos from the air - return to base when finished.

Smuggling Missions

Smuggling missions require you to take a specific item or commodity between two airfields, without attracting the attention of the authorities! You'll usually have to fly below a set altitude, probably at night, and without any running lights on the aircraft. If you get caught however, your aircraft can be impounded until you've paid off substantial fines, so be careful which shady characters you deal with!!!

Ferry Flights

Occasionally, and if you're trusted by your contacts, you may be asked to ferry an aircraft between two locations. These are usually long intercontinental trips which will require a long flight and multiple stops for refueling however the occasional short trip may also pop up. Note that as you don't own the aircraft, you can't repair it - so ensure you deliver it to customer with as little damage as possible or you'll fail the mission and your contact will be very disappointed in your skills.

The Overview Map - Mission Tab

For any selected airport in the Overview map, you can view any missions available at that airport from the "Missions" tab on the left hand side of the screen.
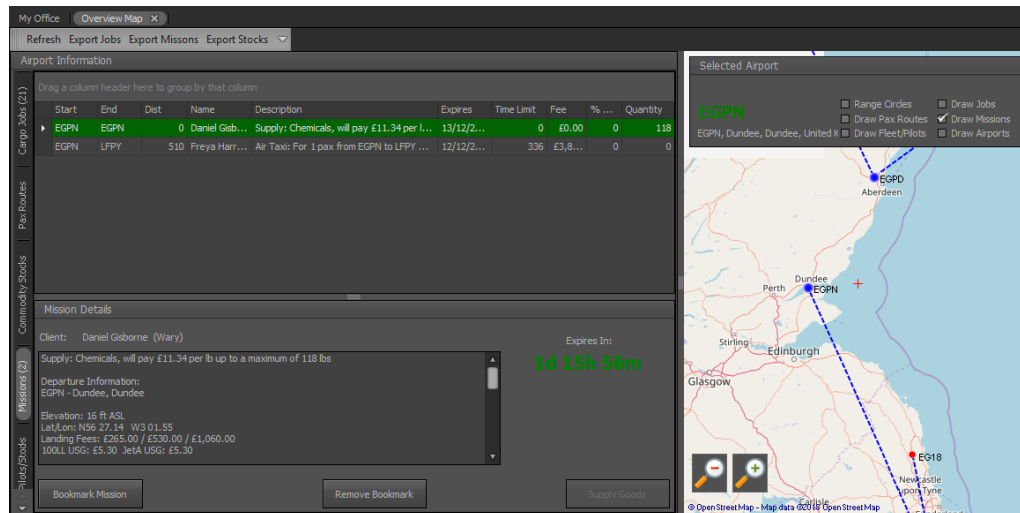
Depending on the mission type, you can "Accept" the mission in the same way as a cargo job, and also fly the mission from this screen. Note that Supply missions DO NOT have to be accepted - they are passive missions which remain active while the mission is available.

Bookmarking a mission

For missions which you do not need to "Accept" - i.e. commodity supply missions, you can "Bookmark" them instead. This will show the mission on your "Accepted Missions" screen as if it had been accepted in the same way as one of the other mission types. If you no longer wish to see the mission on the accepted list, you can remove the bookmark from the button in the Mission Detail section of the screen.

6.1   Available Missions

The available missions screen, accessed from **MISSIONS, AVAILABLE MISSIONS** on the top menu, shows **ALL** available missions at any airport which you have visited. You can therefore view all missions available, rather than just those at a particular airport on the World Map.

Available Missions
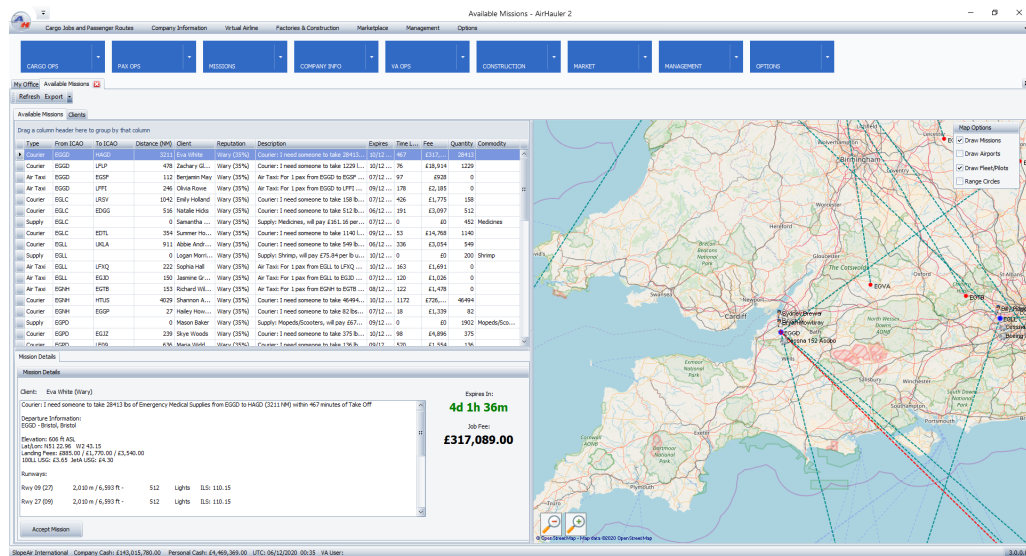
You can accept or bookmark any mission from this screen. If the mission is one which does not have to be definitively accepted, you can supply goods to the mission from here also.

Once you accept a mission from this screen, it will be removed from the list and be shown on the "[Accepted Missions](#) 103 " screen instead.

Clients Tab

The available missions screen also includes a "Clients" tab which shows the details of all the mission clients who you have encountered, which airport they are located at, and your current reputation level with that client.
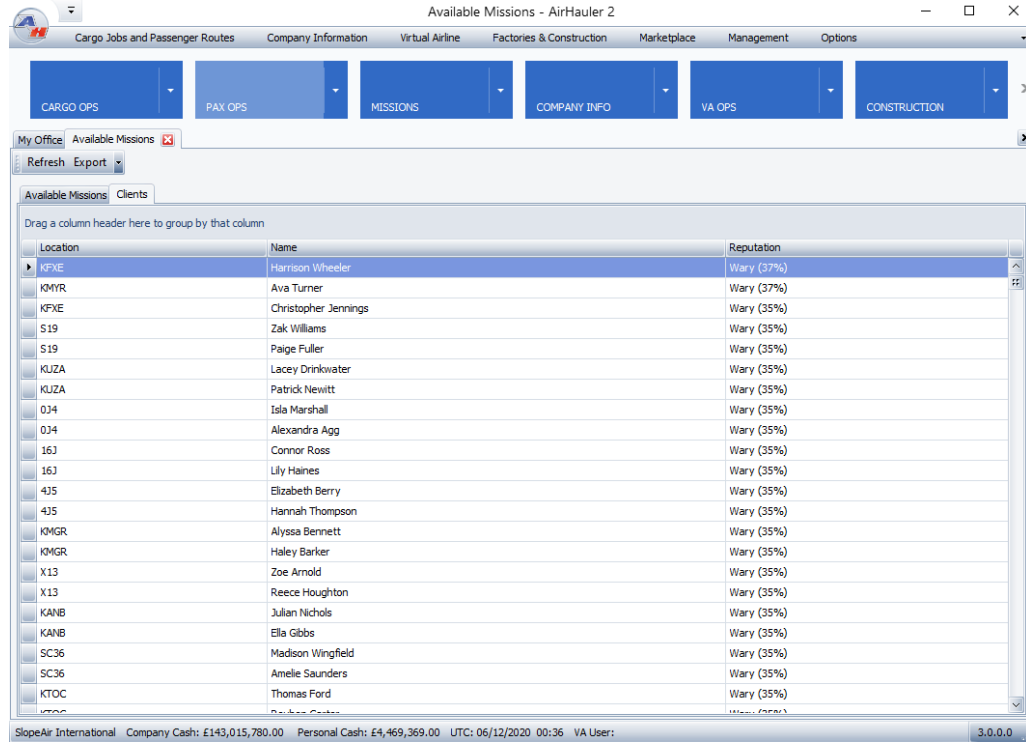
6.2 Accepted Missions

The Accepted missions screen shows all missions which you have accepted, or bookmarked (in the case of commodity supply missions) regardless of airport.
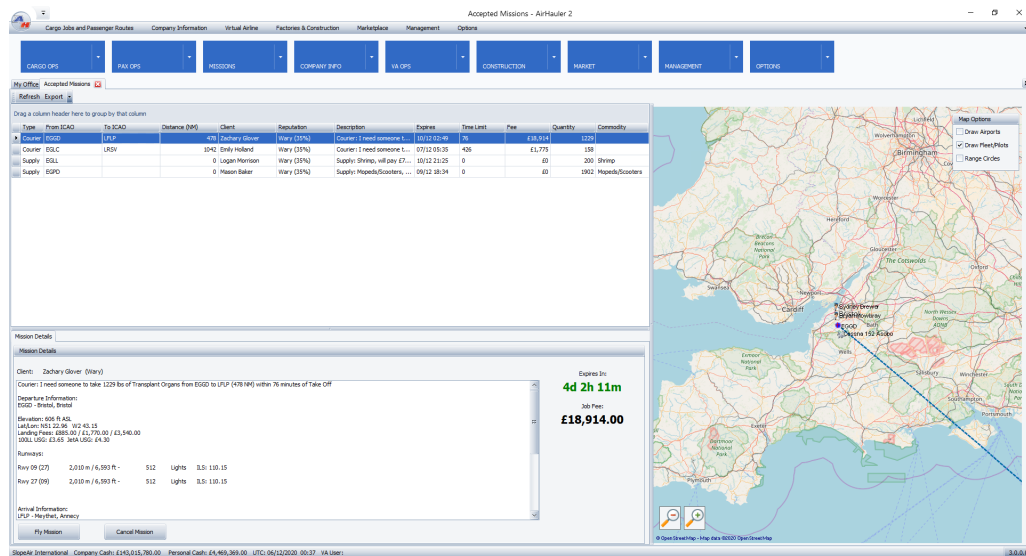
From this screen you'll be able to supply goods to commodity missions, or fly other mission types.

Note that the "Supply Goods" button will not be active unless you have aircraft at the appropriate airport with the required commodity!

To fly a mission, simply select it from the list, and click the "Fly Mission" button at the bottom of the Mission Details section. You can also cancel the mission (but be aware that this will incurr a reputation penalty) by clicking the "Cancel Mission" button.

6.3   Humanitarian Missions

Humanitarian missions appear in response to natural disasters or emergency situations around the globe. You can see all the humanitarian missions available (if any), from this screen, and review the requirements for each.

You can supply goods to these missions in return for a reputation increase - you do not receive any financial compensation however.

Humanitarian missions will appear in response to real world events, and you will be informed when new missions are available.

Whilst a humanitarian disaster is occurring at an airport, the commodity market at that airport will be suspended, as will the markets of other nearby airports as the authorities focus their energies and manpower on dealing with the current situation.

Humanitarian missions typically have a quantity of goods they require - as you deliver goods to fulfill that requirement, you will be rewarded with a reputation increase based on the volume of goods you deliver, up to a maximum value.

Humanitarian missions do **NOT** need to be accepted - simply offloading the required commodities will allocate them towards the humanitarian mission goal.

Commodities and Production

7　　Commodities and Production

Commodities are used in AH2 as the basis for cargo jobs for the type of goods to transfer as part of that job. However, commodities can also be bought and sold at most larger airports allowing you to trade goods between airports for a profit.

There are 3 'tiers' of commodities. Tier 1 commodities are generally available at airports and can be bought and sold. Not all airports trade in all commodities however. Tier 2 & 3 commodities are not available in the market and must be made at a factory. These commodities can sometimes be sold in particular locations, or can be used to fulfill supply missions or humanitarian missions. Tier 2 & 3 commodities are made from other commodities (usually of a lower tier).

Factories can be constructed at any of your bases to produce these higher tier commodities. See the chapter on 'Factories and Production 112' for more details.

7.1　　Commodities, and Tiers

The Items Screen

There are 3 distinct tiers of commodities.

Tier 1 commodities are generally available and can be freely traded.

Tier 2 commodities are made from Tier 1 commodities, and can be found at limited airport markets.

Tier 3 commodities are made from Tier 1 & 2 commodities, and are generally not available, and must be made in a factory.

You can review the various commodities, by tier, from the **CONSTRUCTION, ITEMS** item in the top menu.
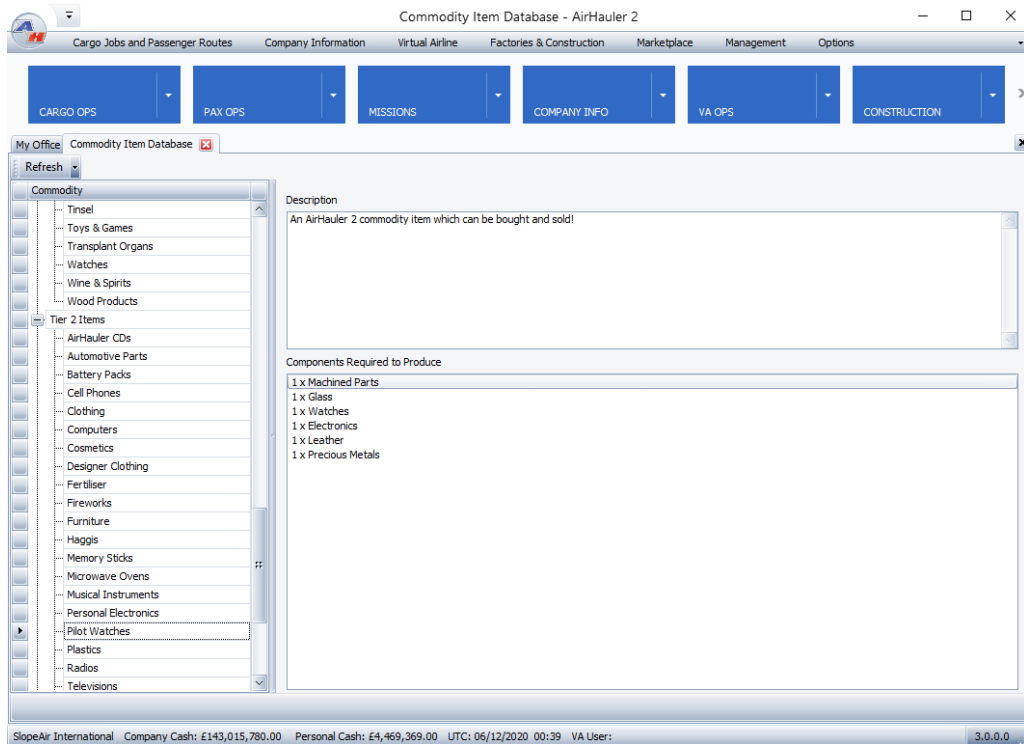
This screen lists every commodity, and the required components/material commodities to produce that commodity if it is a Tier 2 or 3 commodity. Some Tier 1 commodities can also be made in a factory.

Stock Finder

To make it easier to find commodities at airports around the world you can use the **CONSTRUCTION, STOCK FINDER** menu item.
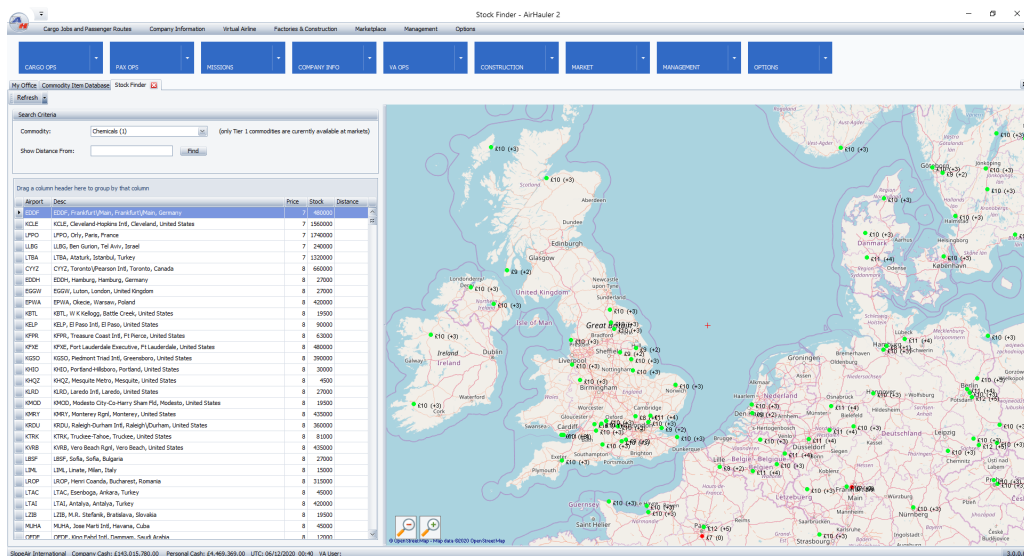
This allows you to select any particular commodity, and see a list of airports which trade in that commodity. You can also set an airport in the filter section which will then be used to display the distance to the other airports in the list. Additionally, if you select an airport and it deals in that commodity, the map view will show the different between the pricing of the commodity at the chosen airport and those selected from the list.

7.2   Storing Commodities

Commodities can be stored, in the same way as cargo jobs, at your bases in 'commodity storage'. You can upgrade your base to add more storage however the overall storage amount is limited by the size of the airport. The larger the airport the more storage you can secure. To store commodities, simply offload them from your aircraft. If you are already at a base you'll be asked if you want to store the items in your storage area from where you can sell them at a later date, or you can transfer them to your factory from the base storage.

You can increase the storage available at your Base by purchasing a larger storage area, however the maximum limit is dependant on the size of the airport the base is located at.

To purchase more commodity storage area, see the "Base Details" tab on the Company Information -> Bases screen for the selected Base.

Commodities can also be stored at Factories which use them for production and also have their own inventories of produced commodities. However, commodities must be transferred back to your base storage (or an aircraft at that base) before they can be moved on or sold.

7.3   Buying Commodities

Buying Commodities - From the World Map

To purchase commodities, select the airport you want to purchase from on the **CARGO OPS, WORLD MAP**. You'll need to have an aircraft at the airport to load the commodities onto, or if the airport is one of your bases, you can store the purchased goods in your commodity storage area.

Select the airport from the World Map, and if the airport trades in commodities you'll see the Commodity Stocks tab on the left of the window.
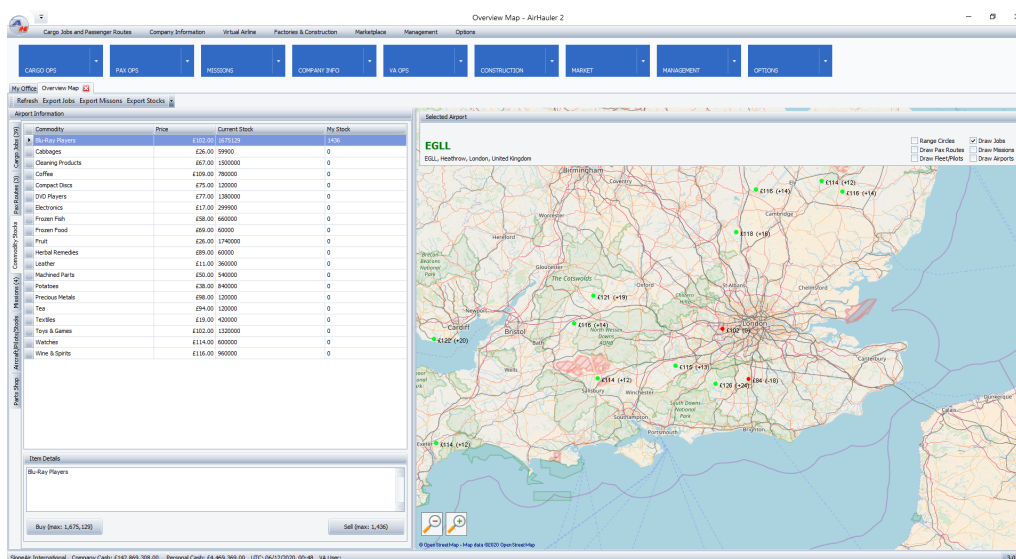
From here you an select any of the commodities on offer from the list on the left hand side, which will show the commodity name and the current price. When you select a commodity, the markers on the map view will change to show relative prices of commodities at airports on the map. A red dot indicates that the commodity is cheaper at the other airport, whilst a green dot shows that the commodity is more expensive at that airport and you will make a profit if you buy here and sell there.

To purchase your selected commodity, click the "Buy" button in the bottom left of the window.

You can then select the quantity you want to purchase, and the location it will be delivered to which will be an aircraft at the airport or your base storage area.

Then click "Buy" to purchase the goods, and they will appear in the aircraft or base storage area you specified.
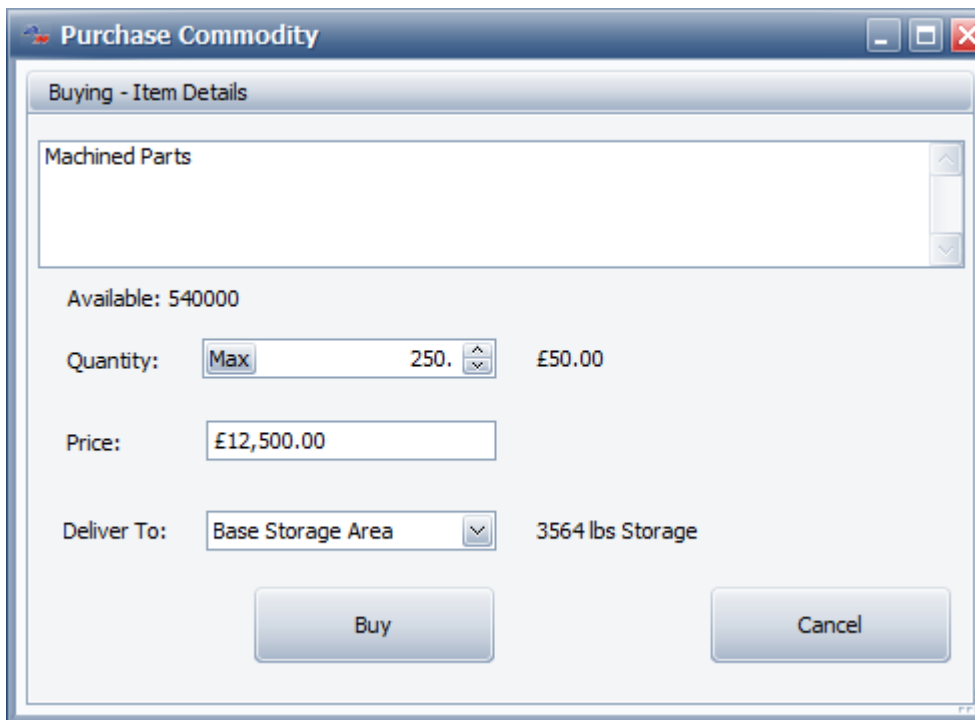
7.4 Selling Commodities

Selling Commodities - From the CARGO OPS, WORLD MAP

To sell commodities from the World Map, select the airport at which the commodity is stored, and then click on the "Commodity Stocks" tab.
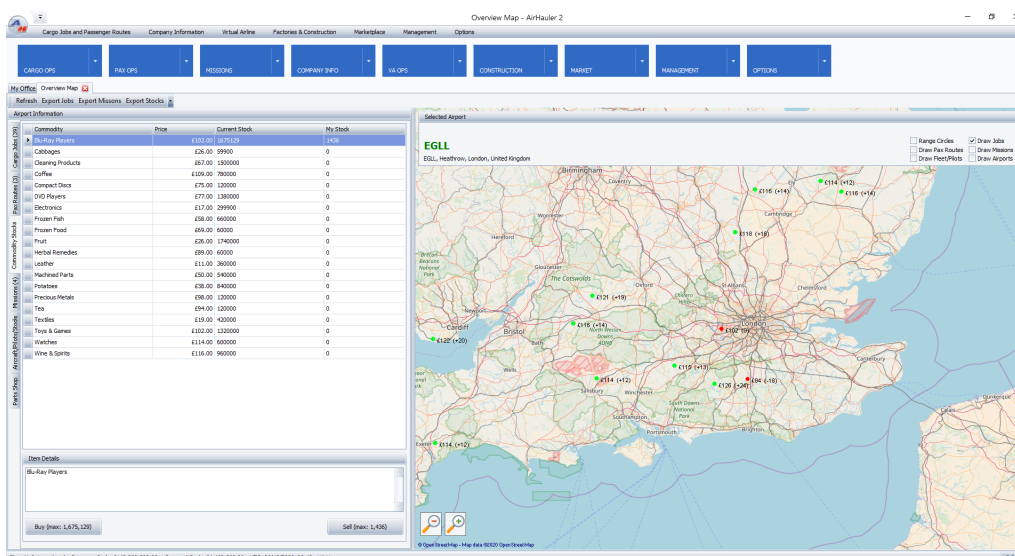
The available commodities at that airport will be shown, with your current stock level of each commodity shown under the "My Stocks" column.

To sell the commodity, select it from the list and click the "Sell" button in the bottom right of the pane. This will open the "Sell Commodity" window.
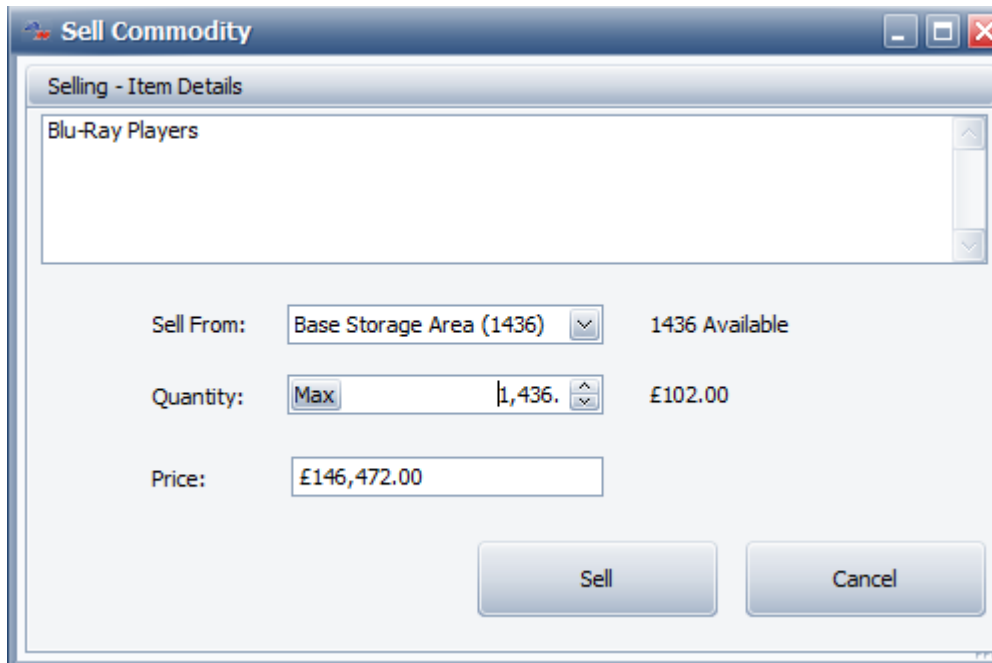
Use the "Sell From" drop down to select where you want to sell the stock from - either your storage at that airport (if you have a base there), or the aircraft the commodity is currently loaded onto.

Choose the amount of the commodity which you wish to sell, or click "Max" to sell all of that commodity.

Confirm the sale with the "Sell" button, and you'll be credited for the goods. Note that not all airports trade in every commodity, and you may be prevented from selling commodities at airports which do not deal in them.

Selling Commodities - From the Base Screen

You can also sell commodities from the **COMPANY INFO, BASES** screen.

Select the base where the commodities are located from the list, and then select the "Base Commodity Stocks" tab from the lower section of the window. Then select the commodity you wish to sell, and click the "Sell" toolbar button.
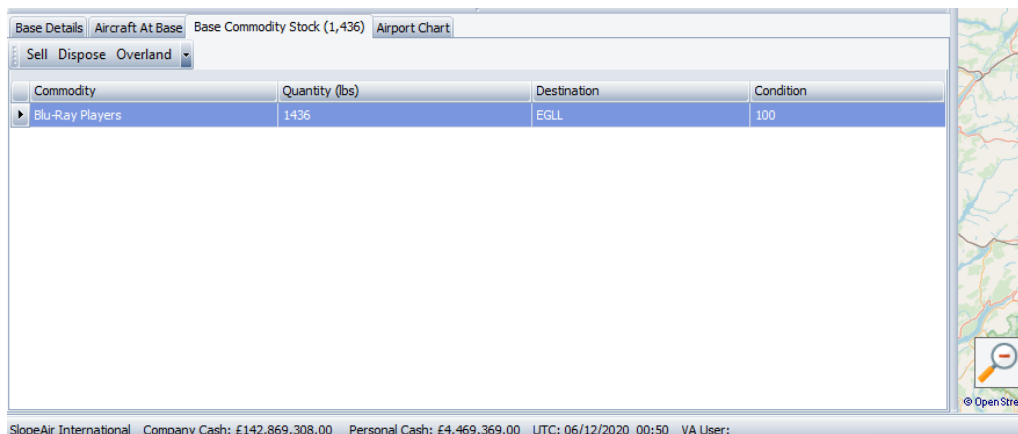
Note that not all commodities are traded in all airports, so you may find that it's not possible to sell certain commodities depending on your location. In that case, move the commodities to a different airport which trades in those commodities.

Click the Sell toolbar button opens the "Sell Commodity" window. Select the amount you want to sell (or click "Max" to sell all the stock of that commodity) and then confirm the sale by clicking the "Sell" button.
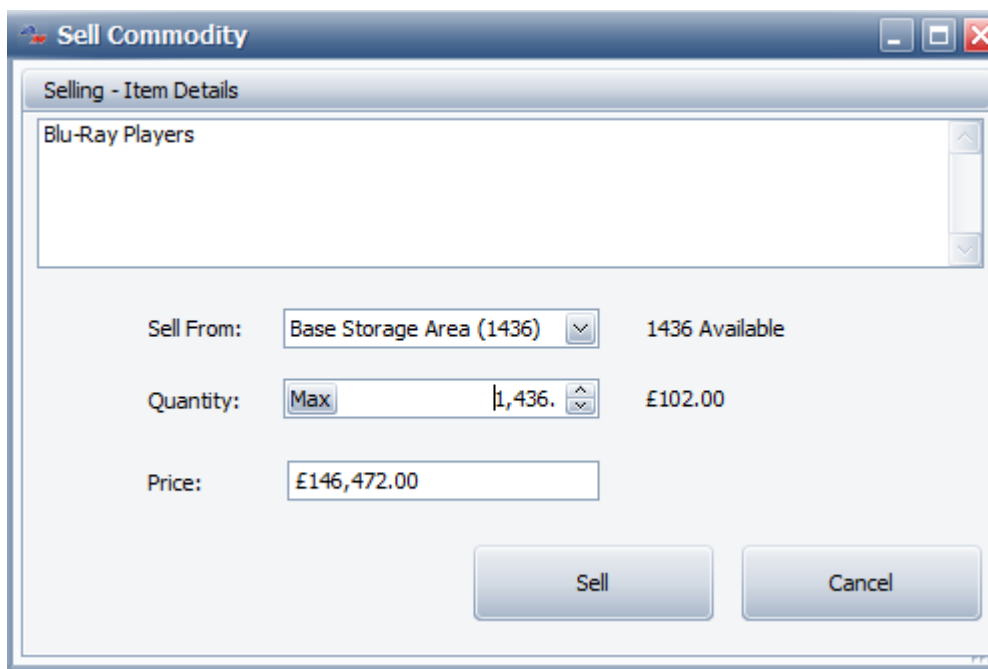
7.5   Factories and Production

You can produce sought after commodities in Factories which can be located at airports where you have a base. Only one factory can be opened at any one base.

Factories can produce up to 3 different commodities, each of which will require tooling to produce at a cost. Each of those commodities will require other commodities as part of the production process, so you will need to deliver those commodities to your base, and then factory if they are not already available at the local base.

Factories are opened/closed and managed from the **CONSTRUCTION** menu item under the **FACTORIES** menu item.
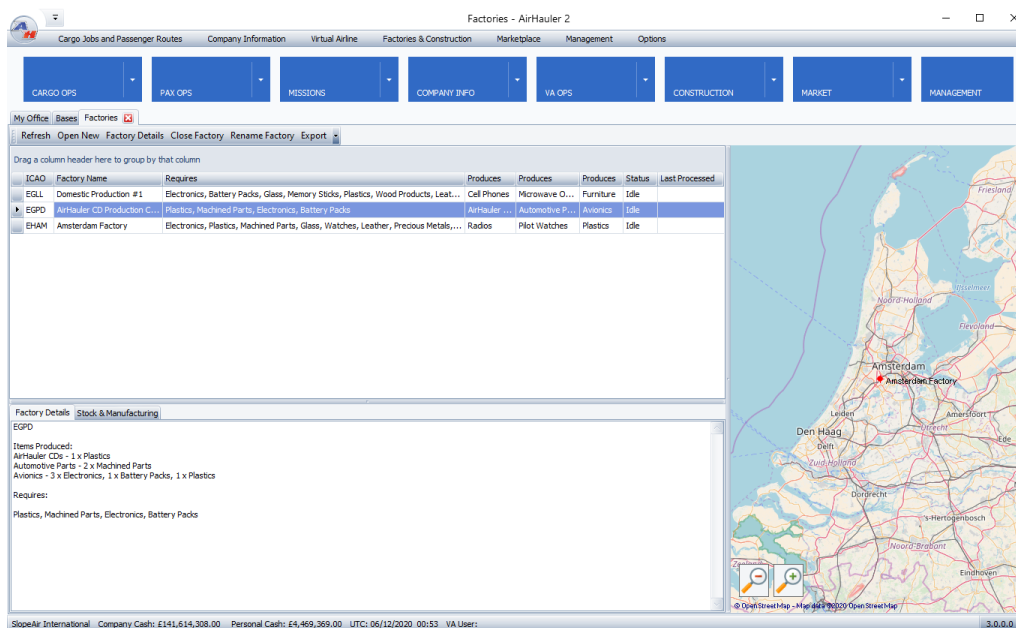
From this screen you can manage your factories, change the commodities which they can produce, transfer stock into and out of your factories to the airport, and schedule the production of new commodities.

7.5.1 Opening/Closing Factories

Opening a Factory

To open a new factory click "Open New" from the Factories Screen. You'll then be presented with the "Open Factory" screen.

You can choose the location for your factory, and enter a name in the top two fields. Remember you can only have one factory at any one base. If no bases are listed in the dropdown, you have no available bases to open the factory at, and you should consider opening a new base, or closing an existing factory to allow the creation of a new one.

You can then set up to 3 commodities which the factory will produce under the Item 1, 2 and 3 drop down boxes. As you do so, the tooling cost will be shown, all of which will be added together to determine the opening cost for your factory (listed under Total Cost). You do not have to specify all 3 items at this point, only a minimum of one item as you can set the other production items at a later date (you cannot however change an item once it has been set).

Once you are happy with your selection, click "Ok - Open" to open your new factory. You will now be able to make the commodities that you've specified at this factory, provided the factory has the component items required.

Closing a Factory

If you no longer require a factory, you can close the factory simply by selecting the Factory from the list, and clicking "Close Factory" on the toolbar. Your factory will be immediately closed. There is no reputation penalty for closing factories.

7.5.2   Manufacturing commodities

You can use factories to make the commodities which you specified when opening the factory (or at a later point).
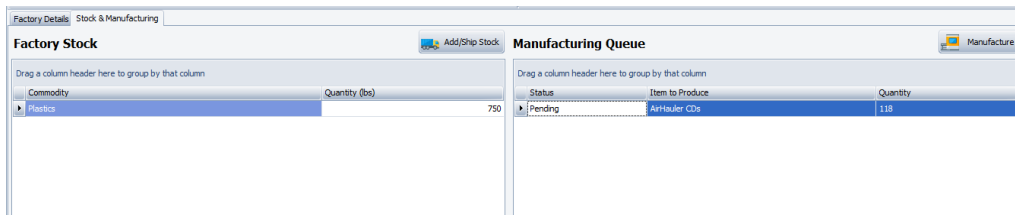
Each tier 2 and 3 (and some tier 1 commodities), can be made from component commodities. To see the recipe for any particular commodity, review the commodity's requirements in the "Items" Screen under the Factories and Construction menu tab.

In order to create the commodity, you must supply the factory with the appropriate component commodities.

To manufacture commodities, first select the Factory which can create that commodity from the Factories list. Then click on the "Stock & Manufacturing" tab in the lower section of the window.

From here you can ship stock from your airport to the factory, and then manufacture the commodity required. You can also then ship the manufactured commodity back to your airport for transport to another location.

To transfer commodities from your airport to the factory, click the "Add/Ship Stock" button.

You can then transfer commodities from the airport to your factory (and vice versa) in the same way as loading cargo on/off aircraft.

Once you have the appropriate stocks at your factory to manufacture the goods, click the "Manufacture" button on the right side of the pane.
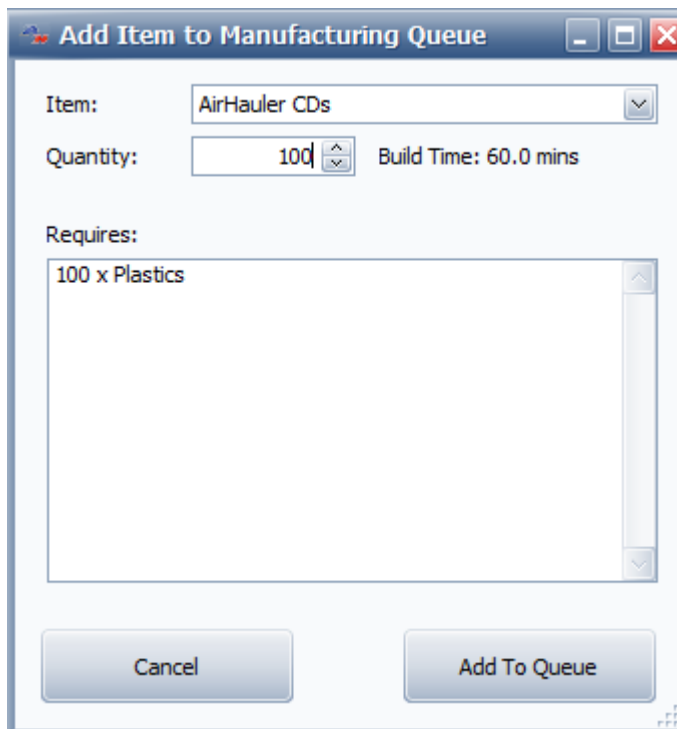
From this window, you will be able to select the commodity to be manufactured, and the quantity. The requirements to make that amount of the commodity will be listed, and you can confirm the manufacturing queue entry. You can add multiple items to the queue and your factory will process them one at a time until completed.

Once the commodities have been manufactured, uses the "Add/Ship Stock" button to ship them back to your airport for distribution or sale.

7.5.3   Construction Facilities

Rather than buy aircraft from the Marketplace or from the Used Aircraft market, you can construct them from parts at a specialist construction facility.

You can build construction facilities at any of your bases (provided the runway at that airport is long enough for your constructed aircraft to depart!).

Building a Construction Facility

To build a new construction facility select the "Construction" icon from the construction menu on the Factories & Construction main menu.

Note that construction facilities are large, complex facilities, and will take some time to construct (up to 2 weeks in some cases). They are not opened instantly and there will be a build time required, even for a facility at a small airport. The larger the airport, the larger the facility required as the longer

runway can support the construction of larger aircraft. This will increase both the construction cost, and the build time for the facility.
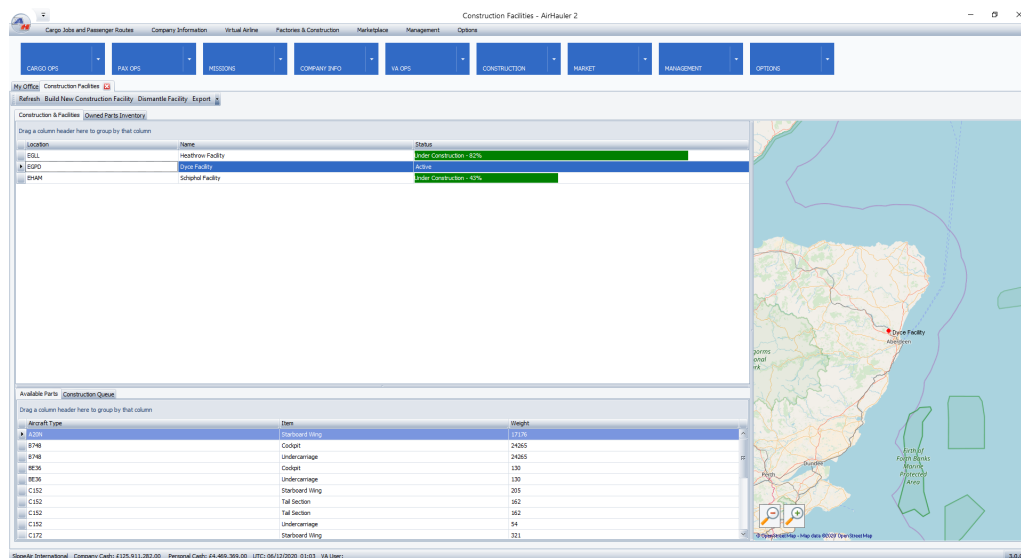
Then from the Toolbar, click "Build New Construction Facility". You'll be presented with the cost of the new facility, and the opportunity to change the name of the facility, and then click "Ok" if you accept the cost & name.

The Construction Facility screen also shows you thee following information - the Construction Facilities which you have stated at one or more of your bases, the list of parts which you currently own and their location, and in the lower section of the window, available parts at that location, and lastly, the "Construction Queue" tab.

Closing a Construction Facility

You can close construction facilities which are no longer required. Select the facility from the Construction Facilities list, and click the "Dismantle Facility" button. You'll be refunded a portion of the construction facility build cost, and once you confirm, the facility will be closed.

7.5.3.1   Building Aircraft from Parts

Rather than Purchasing aircraft, you can build them directly from parts which you will find scattered around at airports. Purchasing these parts and using them to build an aircraft is far cheaper than buying a new aircraft from the manufacturer directly.

These aircraft parts can be assembled into the full aircraft at a Construction Facility which you can construct at a base.

Note that these aircraft parts are discrete parts for specific aircraft, and are NOT related to the aircraft parts commodity!

In order to construct an aircraft, you'll need to build a construction facility, and then you'll require all of the requisite parts to do so - these are:

Cockpit
Fuselage
Tail Section
Port Wing
Starboard Wing
Undercarriage
Engine(s)

You will need one of each part to construct the aircraft with the exception of the engines where you must have the correct amount of engines for that aircraft (i.e. you cannot construct a 2 engine jet liner with only one engine in your inventory).

Parts are specific to individual types of aircraft, and can not be used to construct other aircraft. Once you've purchased a part at an airport, you can either move it to your construction facility's airport, or you can have it transferred automatically by a courier for a fee.

Constructing Aircraft from Parts

Once you have gathered the appropriate parts to your base at which your construction facility is located, select the facility from the Construction Facilities screen, and then in the lower tab, select "Construction Queue".
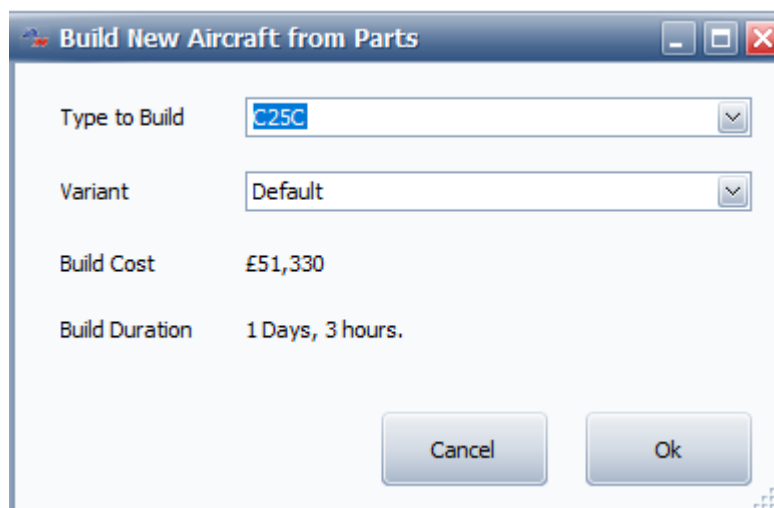
Click the "Build Aircraft" button to start the construction of the aircraft. You can add multiple aircraft into the queue and they'll be completed in turn.

Once the aircraft has been constructed - it's ready to fly!

7.5.3.2   The Part Finder

You can check any airport for parts from the World Map screen, and as you, your pilots and aircraft travel around various airports, more parts will become available (as you discover which parts are for sale and where).

As these parts become available, they'll be listed on the **PART FINDER** screen under the **CONSTRUCTION** main menu tab.

From this screen you can easily see which parts are available at which airports, filter for parts for a particular aircraft, and also show the distance to the parts from a particular airport. You cannot purchase the part from this screen as you'll still need to either fly there yourself, or have one of your pilots visit the airport to purchase the part.

You can purchase the part from the World Map screen with that airport selected as discussed in the topic.

Virtual Airlines

8   Virtual Airlines

Virtual Airlines allow you to create or join a company where the other pilots are AirHauler players rather than AI pilots.

You can create your own virtual airline and invite members to join, or advertise for members on the Hiring Bulletin Board, and you can also apply to other VA's from the BBS. Note that you can only be a member of one VA at any one time.

The Virtual Airline operates separately from your own AirHauler Company, so you can fly your own company jobs along side VA jobs (even using VA aircraft!), or you can fly purely for the Virtual Airline. You can also (if you have permission to do so), transfer your own company's cargo jobs to the Virtual Airline, or accept jobs from the World Wide Job board.

8.1   Starting a Virtual Airline

You can start, or join a Virtual Airline so you can participate in flying for your virtual company along with other AirHauler 2 pilots.
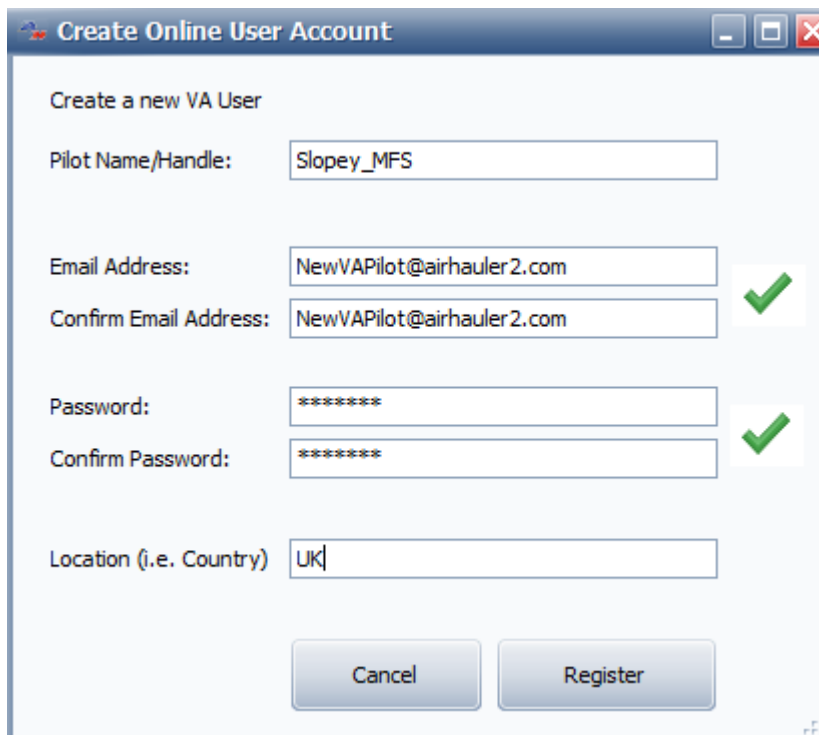
Starting a new Virtual Airline

To start a virtual airline, click on the **VA OPS, VA INFO** button on the toolbar.
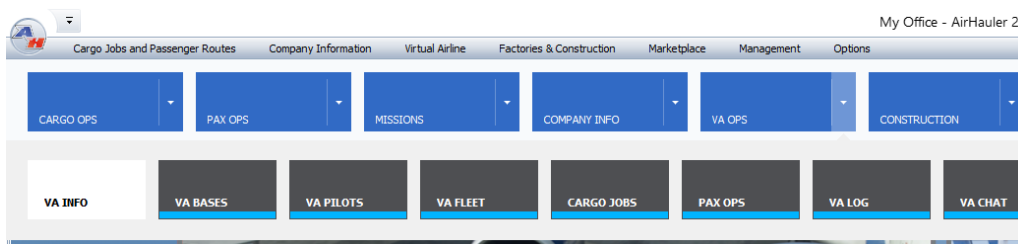
You'll need to create a VA account in order to create a new VA company, and you'll also need to enter your email, and password for your new account also. Note that it is only possible to be a member, or owner, of **one** Virtual Airline per email account. If you already have a VA account you'll be prompted to enter your password to login, otherwise, complete the New User Account form to register.
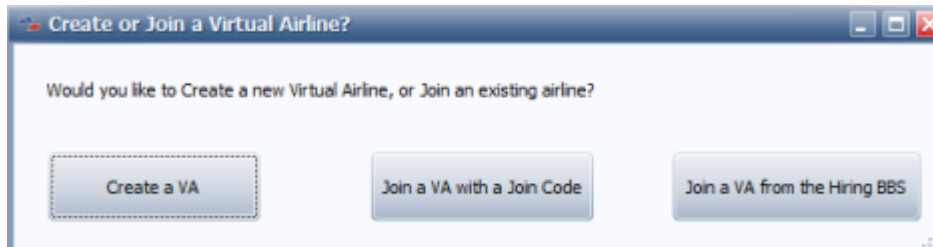
Once your new account is created, you'll be able to select to Create or Join a Virtual Airline!

To create a new virtual airline, click the "Create a VA" button.   For Joining a VA, please see the Joining a Virtual Airline [124] topic.

Enter the details for your new Virtual Airline. You can enter your VA Name, and select a home airfield. This works in the same manner as creating your first base in a normal AirHauler 2 company - click the "Choose" button to select an airfield for your Virtual Airline to open its first base at.

You can also transfer cash over to your Virtual Airline from your current company account. The VA bank account is separate from your company's (or your personal) bank account, and you can deposit and withdraw funds from the account if you have the correct permissions. To do so, set a Bank PIN (personal information number) which will be used to access your company bank through the ATM as required.

Once complete, click "Create Company" to get your new Virtual Airline up and running!

8.2   Joining a Virtual Airline

If you'd rather not run your own virtual airline, you can join one! Virtual Airlines can advertise for new members via the Hiring Bulletin Board in AirHauler 2, or on their own 3rd party websites.

The Hiring Bulletin Board System (BBS)

Virtual Airlines can advertise for new members on the Hiring Bulletin Board.

To view the Hiring BBS, select it from the Main Menu under the **VA OPS, HIRING BBS** menu item. This lists all Virtual Airlines who are currently hiring at the moment (which if you have your own VA, you can set in the Hiring and Advertising section).
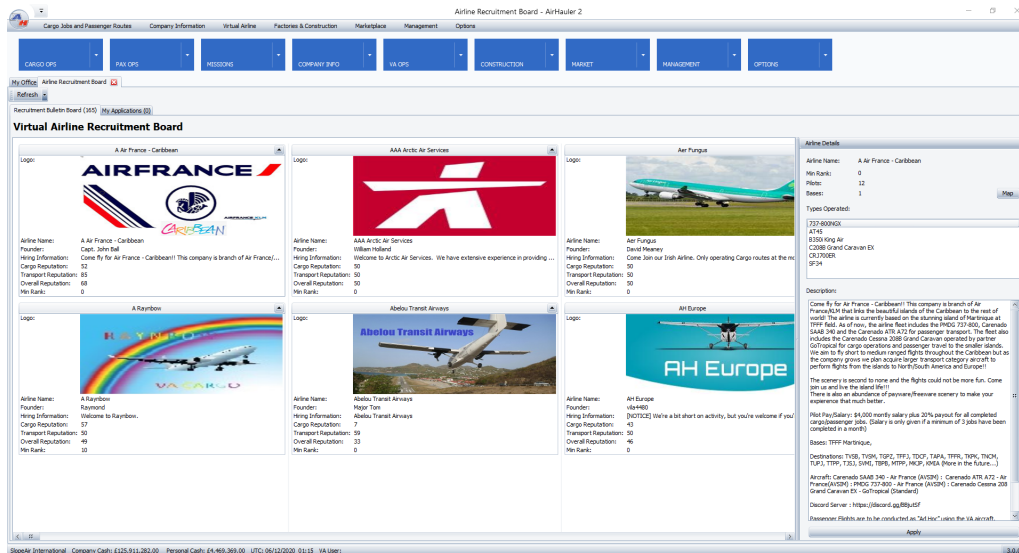
You can scroll through the list of Virtual Airlines, and if you find one which you think you'd like to join, select the airline by clicking on the logo, and from the Airline Details section on the right hand side, click "Apply".

That'll open an "Apply to VA" window where you can enter text supporting your application - this text will be forwarded to the Airline owner, so make it concise and informative as they'll based their decision on whether to hire you from this post!

Once you have applied to a Virtual Airline, you'll need to wait for them to notify you if you've been accepted by the airline. You'll receive an email telling you if you've been successfull, and next time you open AirHauler 2, you'll find the Virtual Airline section is populated with your new VA which you are now a member of.

Joining by Join Code

Virtual Airlines can distribute a "join code" to applicants directly rather than use the Hiring Board. If you are the owner of a Virtual Airline, you can create a new Join Code from the **VA Pilots** screen - using the "Get Join Code" toolbar button. You can then forward this code to people you'd like to invite to join your airline, or post it on your own VA website for example.

To join by this method as a new VA Pilot, you need to not be a member or an existing owner of a Virtual Airline.

Click on the **Company Info** button in the Virtual Airline top menu, and you'll be asked if you wish to Create a new VA, or Join an existing VA.

Click the "Join a VA with a Join Code" button to proceed. You'll then be prompted for the Virtual Airline's Join Code.
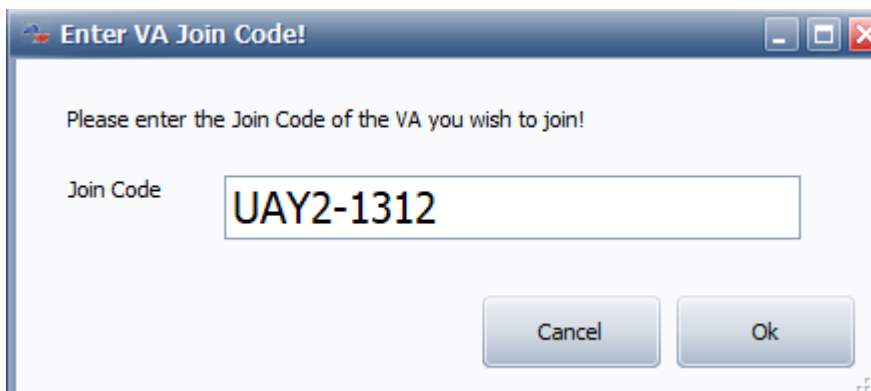
Enter the joining code for the airline, and click "Ok" - you then be joined into that Virtual Airline as a new member, and the Virtual Airline menu buttons will now be populated with your new VA's details.

8.3   VA Bases

Just as with your own AirHauler company, a Virtual Airline can open bases.

Unlike cargo jobs, Passenger routes for a Virtual Airline can only be flown from a base. VA Aircraft at a base will also benefit from reduced repair costs.
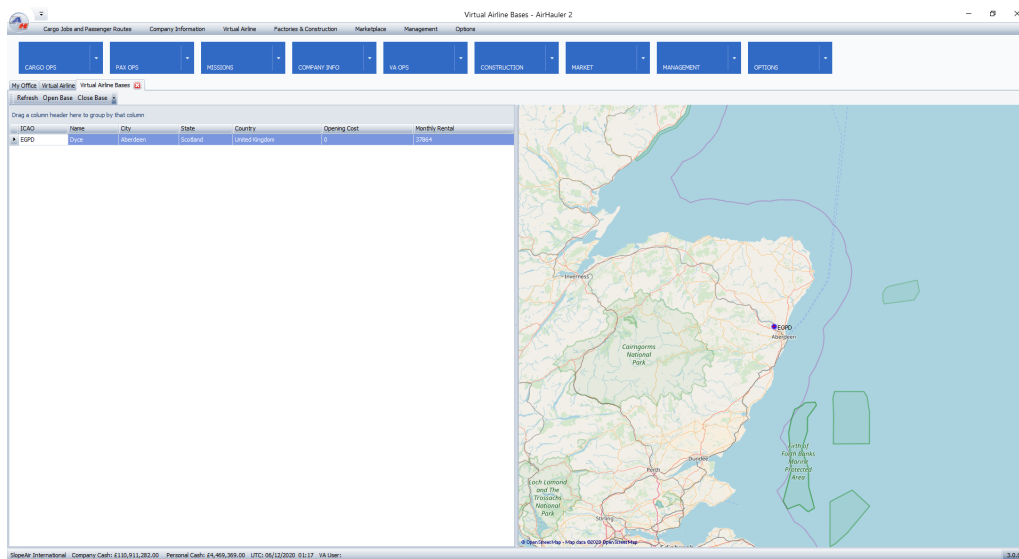
Opening a new Base

To open a base, go to the Bases screen from the **VA OPS, BASES** menu item, and choose "Open Base" from the toolbar.   In the same way as a normal AirHauler2 company, you will need to have a pilot at that airport in order to open a base.

Click "Open Base", and select the airport you want to open the base at from the airport search screen. Once selected, click OK.

Confirm the base details and opening costs/monthly rental and select Ok.

VA Bases are constructed instantly, and require no time to construct (unlike personal company bases).

Closing a Base

To close a VA base, simply select it, and select "Close Base" from the top menu (or right click, and select "Close Base").

Note that if you close a base which has passenger routes departing from it, those routes will be removed. You will be charged pro-rata for the monthly rental up until the point of closure.
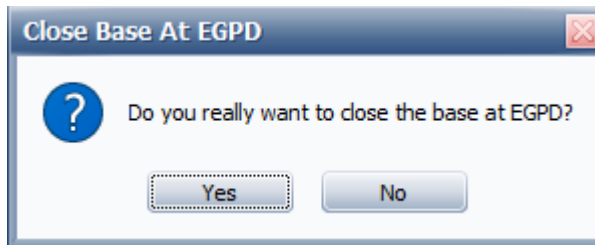
8.4   VA Fleet

You manage your Virtual Airline fleet from the **VA OPS, Fleet** menu item under the main menu.
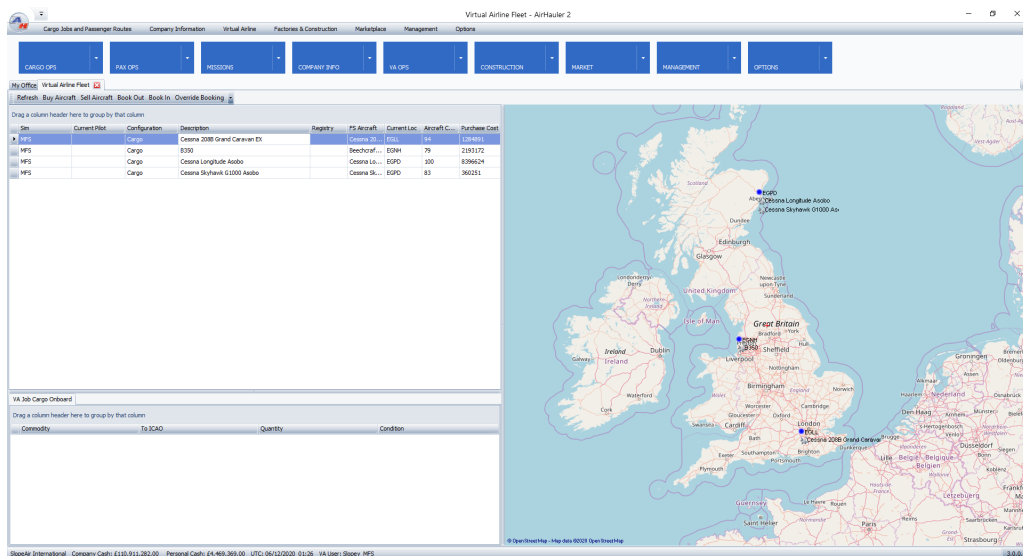
From this screen you can Buy and Sell aircraft into and out of your Virtual Airline's fleet. You can book the aircraft out to yourself, or back in again if you already have it booked out, you can review the cargo on-board the aircraft, and you can override the booking out if you want to clear any current bookings, and make the aircraft available for other VA pilots - provided you have permissions.

For information on Booking Out/In/Overriding bookings, please see the topic

Note that it is possible for MFS, FSX/P3D and X-Plane players to be members of the same Virtual Airline. In this instance, the sim type of a particular

aircraft will be listed in the VA Fleet screen - MFS users (i.e. who are using the MFS version of AH2) cannot fly FSX/P3D/X-Plane version of the aircraft, and vice versa.

Buying Aircraft for your VA

You can buy aircraft for you VA in the same way as you can purchase them for your own AH2 company. To purchase a new aircraft, click on the "**Buy Aircraft**" toolbar item on the VA Fleet screen. Note that you cannot currently lease aircraft for your VA, and they must be bought outright.

When selecting an aircraft to purchase, keep in mind the pilots in your Airline - they may not all have the same aircraft in their simulator installation, so where possible ensure that you purchase aircraft which you are reasonably sure that your VA pilots will be able to use.

Aircraft purchases are paid from the Virtual Airline's own bank account.

You will be able to choose the configuration of the aircraft, either passenger or cargo, and then will be prompted for which of your airline's bases you would like the new aircraft delivered to.
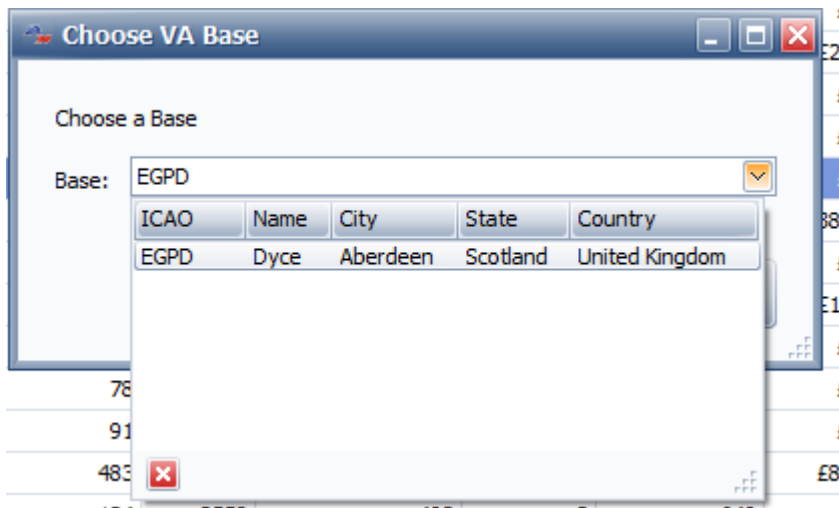
The aircraft will be immediately delivered to your base, and ready to fly by any of your VA Pilots.

Selling VA Aircraft

Selling a Virtual Airline aircraft is very straightforward. Simply select the aircraft you wish to sell, and click the "**Sell Aircraft"** toolbar button. You'll be asked to confirm the sale, and the amount the VA will receive for the sale.
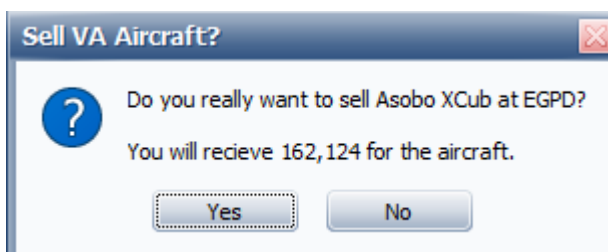
Click "Yes" to confirm the sale, and the aircraft will be removed from your fleet. Note that you cannot sell an aircraft which is booked out to a pilot currently, or which has cargo or passengers aboard.

8.4.1   **Booking In/Out**

Booking out VA Aircraft

To Fly Virtual Airline aircraft, you must first "book them out" to your own fleet. You can then operate the flight as normal, and when finished you "Book In" the aircraft to make it available for others to use. An aircraft which has been booked out can only be flown by the pilot which booked it out until it has been booked in again at which pilot it again becomes free to use.

You can only have one booked out aircraft at any one time.

All users who wish to fly this aircraft, if it's an add-on aircraft, must have the aircraft imported into AirHauler 2, otherwise AH2 will not let you fly the aircraft. You will also need to hold a type rating for the aircraft in the normal fashion.

To book out the aircraft, select the aircraft from the VA Fleet screen, and click "Book Out" from the top menu.
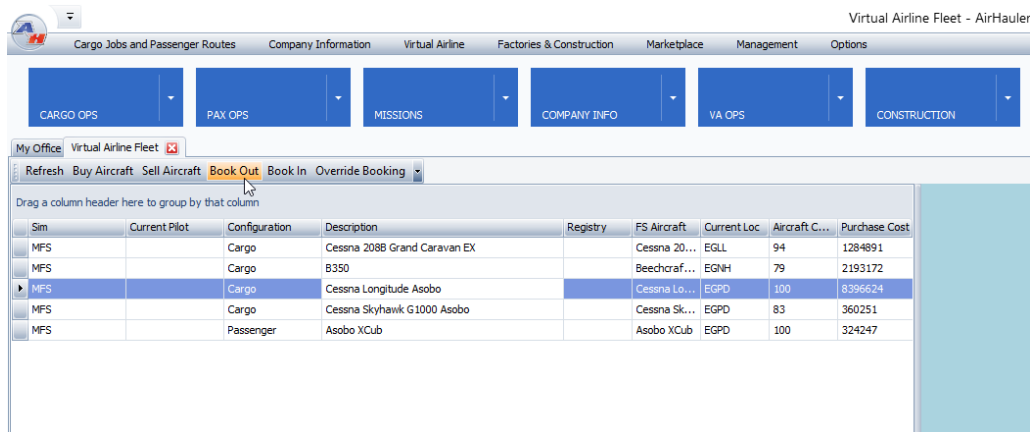
The aircraft will be booked out to you and appear in your own Company Fleet, but denoted with a [VA] marker to show that it's a VA aircraft.

Booking In VA Aircraft

Once you have finished with the VA aircraft, you need to book it back into the Virtual Airline to make it available for other pilots.

From your Company Information -> Fleet screen, select the VA aircraft you wish to return and click the "Book in (VA)" button in the Aircraft Details section at the bottom of the screen.

The aircraft will be booked back in and released for use by other pilots. Note that you cannot book in a VA aircraft which has non-VA cargo on-board, or passengers on-board. You will need to offload non-VA cargo items, and disembark passengers before you can book the aircraft back in.

Overriding the Book Out status

If you have the appropriate permissions, or are the owner of the Virtual Airline, you can override the status of an aircraft and forcibly "Book In" for that aircraft. This is useful in case you have a pilot who has booked out an aircraft but has not returned it when finished, or in a timely manner.

To override the status and book the aircraft back in, select the aircraft from the VA Fleet page and click the "Override Booking" button. Note that if that aircraft is currently in use by a pilot, they will NOT receive any credit for flying

it when they next land. Only use the override button when you know that a pilot is not using the aircraft, unless you wish to return it directly to the Fleet and make it available again.

8.5   VA Members (Pilots) and Permissions

You can recruit pilots (or members) for your Virtual Airline.

They can apply through the VA Hiring Bulletin Board as described in Joining a Virtual Airline 124.

When members join a VA, they are assigned only basic permissions. They can fly cargo and passenger jobs, but cannot purchase aircraft, bases or repair aircraft without specific permission.

All the pilots within your VA are shown in the **VA OPS, VA PILOTS** screen under themain menu.


This screen shows the pilot's name, their "rank" within the organisation (which you can set yourself), the number of jobs they have completed/amount of passengers flown/cargo delivered, and also the last time they logged into the VA via AH2. You can also see if they have Administrator permissions, access to withdraw money from the VA bank account, and if they can repair Aircraft at the far right of the pilot list.

Paying Pilots

In general, pilots are paid as they complete cargo and passenger flights, or on a monthy or weekly basis which you can set up from the Company

Information screen on the **Company Admin** tab (see the topic on VA Company Admin [139] for more details)

However - you may want to make a one off payment to one or more pilots in your Airline. To do so simply select the pilots in the VA Pilot list (you can multi-select by holding Shift or Ctrl in the normal Windows manner), and then click the "Pay Pilot(s)" toolbar button.
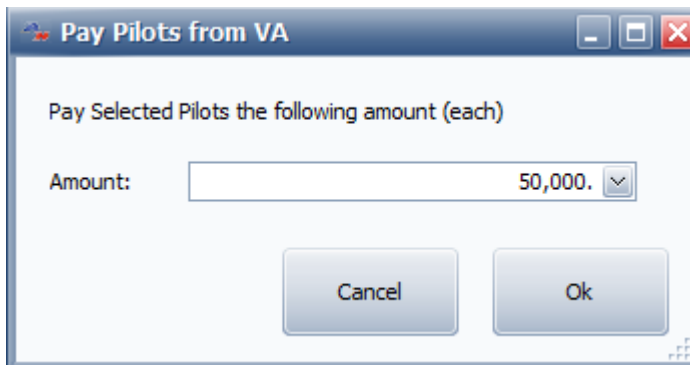

You can enter the amount to pay the pilots, and when you're ready, click "Ok". The payment will be made to each pilot's holding account and the funds deducted from your VA Account.

Pilot Details

To review the details for any of the VA pilots, select the pilot, and then click "Pilot Details" from the top menu, or the right-click menu. This will open the details window for that pilot.

The Pilot Details window is split into two tabs - Performance Data, and Permissions.
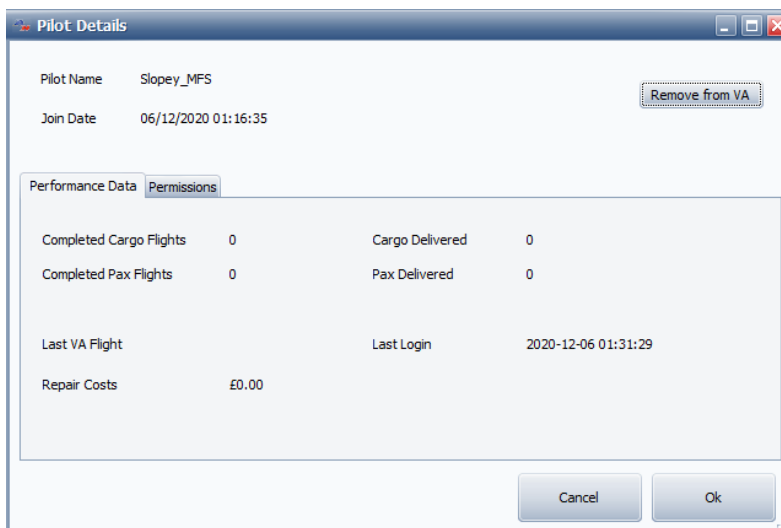
From the performance data tab you have the option to remove the pilot from the VA (if you have appropriate permissions) via the "Remove from VA" button. This will immediately remove the pilot from the Virtual Airline and they will no longer be able to access the Virtual Airline. Note that you cannot remove them if they have aircraft booked out currently - for pilots who are AWOL, you should override the booking first, and then remove them from the VA as necessary.

Pilot Permissions

From the permissions tab of the Pilot Details window, you can assign, or un-assign VA permissions to individual pilots.
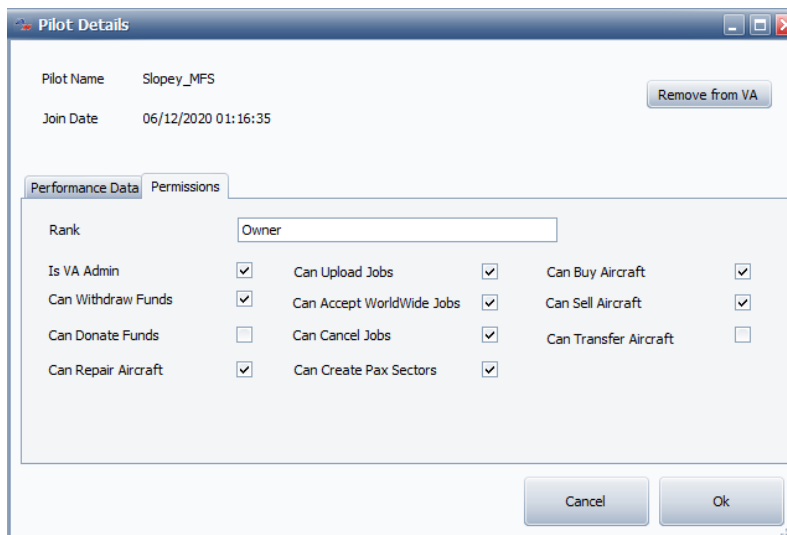
Permissions available are:

- Is VA Admin   - this allows the pilot FULL access to all VA functions, including accepting/removing pilots, buying/selling aircraft and bases, full job/pax sector control, and access to the VA bank account.

- Can Withdraw Funds   - this allows the pilot to be able to withdraw funds from the VA Bank account to their local AH2 company

- Can Repair Aircraft   - allows the pilot to repair VA aircraft

- Can Upload Jobs   - allows the pilot to transfer jobs from their own AH2 company to the VA

- Can Accept Worldwide jobs   - allows the pilot to accept jobs from the World Wide Job BBS list

- Can Create Pax Sectors   - allows the pilot to create new pax
routes from a VA base

- Can Buy Aircraft   - allows the pilot to purchase new
aircraft for the VA

- Can Sell Aircraft   - allows the pilot to sell VA aircraft

You can also set the "rank" of the pilot from this tab. This is a free text entry
field and you are free to specify whichever rank name you want.

Once you have assigned permissions to the Pilot, click "Ok" to save your
changes and the pilot's record and permissions will be updated.

8.6   VA Company Info

The Company information screen shows the main details about your Virtual
Airline which you are either the owner, or a member of.

You can open the Company Info screen from the **VA OPS, VA INFO** main
menu item.
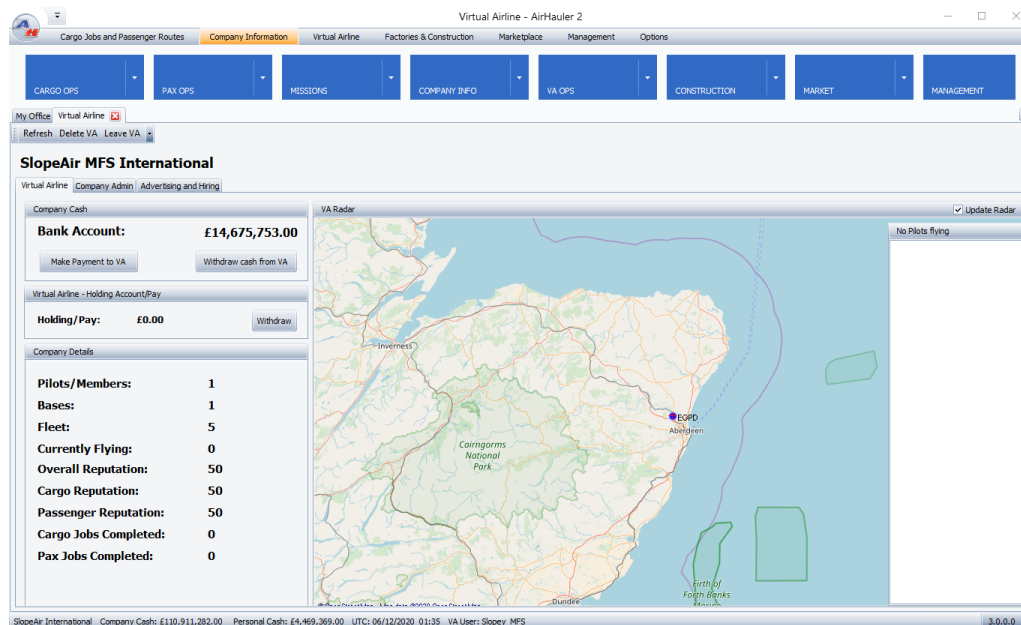
The screen is separated into 3 tabs.

- Virtual Airline

- Company Admin

- Advertising and Hiring

Virtual Airline

The virtual airline tab shows headline figures for your VA. This includes the current value of the VA Bank account, and the ability to make a payment, or withdraw funds to or from the account, any monies which the VA is holding on your behalf, and headline stats about the company including the number of jobs completed, aircraft bases etc.

The right side of the Tab shows a map view of your Virtual Airline bases, and any of your VA pilots who are in flight will also be shown on the map if the "Update Radar" check box is ticked.

Making a payment/Withdrawing money from the VA Bank Account

You can make a payment into the VA bank account, from your Personal Bank account by clicking the "Make Payment to VA" button. Funds must be drawn from your personal account.

You can also withdraw money from the VA down to your personal bank account. Note that you require a specific permission to be able to do this.

Any payments/withdrawals are listed in the VA Events log.

Holding Account/Pay

As you complete passenger and cargo jobs for your Virtual Airline, you'll receive payment depending on the pay policy of the Airline. You may also receive a monthly pay amount if the owner of the virtual airline has set up a monthly payment to pilots. When you accrue this money, it is held in your "Holding/Pay" account until you withdraw it down from the Virtual Airline. You can withdraw these funds at any point with the the "Withdraw" button. If you have a holding pay balance when you first open the Company Info page, you'll be asked if you want to retrieve it at that point. Any funds retrieved will be placed in your personal bank account.

Leaving the VA

If you wish to leave the VA, you can do so by clicking the "Leave VA" button. You will be immediately removed from the VA if you opt to leave it, and will lose any funds in your holding account. You cannot leave the VA if you have a VA Aircraft booked out to you.

If you are the owner/founder of a VA, you cannot leave it. You will need to delete the VA instead.

Deleting the VA

Should you wish to delete the Virtual Airline, then select the "Delete VA" button from the top menu. Only the owner/founder can delete the VA. Deleting the VA will instantly remove all VA details from the AH2 servers, and

delete all bases, aircraft etc. You will also loose any funds you have not withdrawn from the VA bank account.

Any VA members will be immediately removed from the VA, and all VA jobs/passenger routes cancelled.
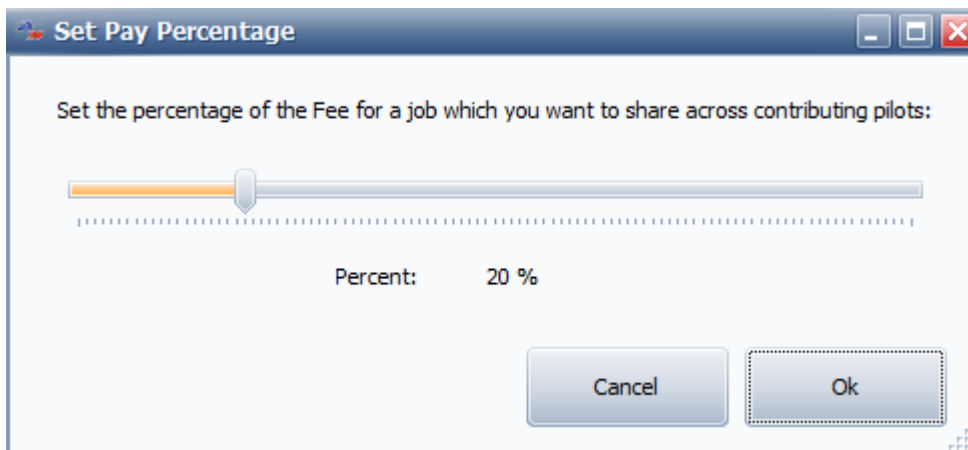
8.6.1   Company Admin tab

The company admin tab allows you to set the payout for your Virtual Airlines pilots as they complete jobs for the airline.


Pilot Renumeration

You can set a percentage payout for the completion of a cargo job or passenger flight in the "Pilot Renumeration" section of the page. Simply click "Set" and enter the required value with the slider.

When your pilots complete a flight, they'll be paid this percentage into their Holding Account. The rest of the fee will go to the company itself. Ensure you set this appropriately to attract new pilots and to make sure they're adequately rewarded for their time!

Salary Options

You can also set a salary for your pilots, which will be paid every period to all of the pilots in your Airline. Payments can be monthly, or weekly. To set a salary level for your pilots, click the "Set" button on the right hand side of the section.
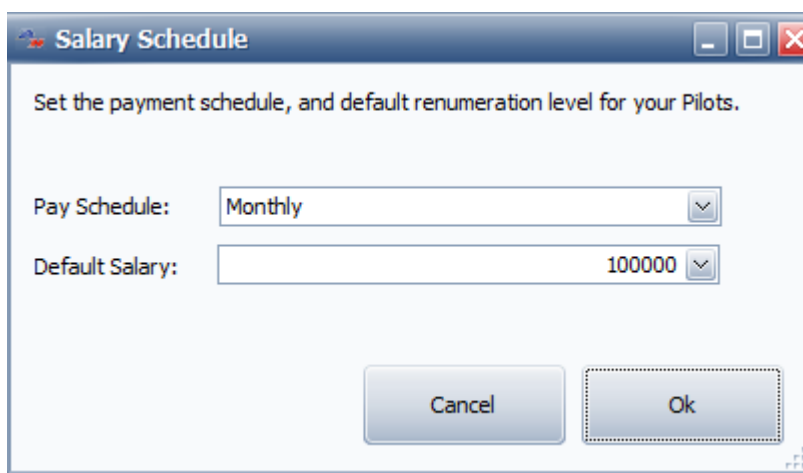
You can set a monthly or weekly pay schedule, and also the amount for the payment.

You can also make ad-hoc payments to individual pilots from the VA Pilots 133 screen.

8.6.2   Advertising and Hiring tab

The Advertising and Hiring tab controls where you can set the visibility of your Virtual Airline in the Hiring Bulletin Board System (BBS), and also process any applications for pilots wishing to join your VA.

The screen contains two tabs: BBS Advert, and Applications

BBS Advert
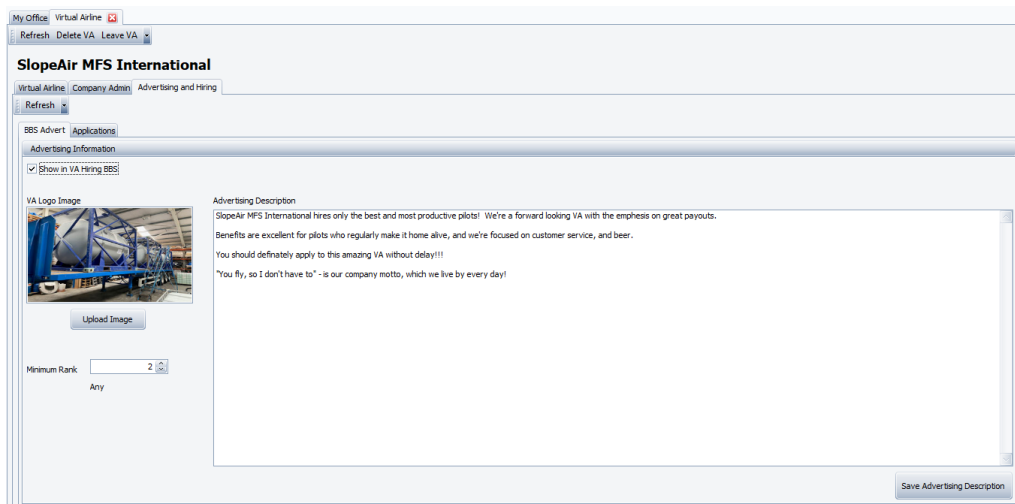
The BBS Advert tab allows you to set the details for your company which you would like to post onto the Virtual Airline Hiring Bulletin Board System. You can upload a logo for your Airline, and also type up a text based description to make your Hiring Board advert stand out from the crowd. Modify the advertising description as required, and click "Save Advertising Description" as required.

You can also upload your own image file to act as a logo for your company. Click the "Upload Image" button to do so. Note that large, very hiqh quality images may be too large to be uploaded so you may have to resize the image down in order to upload it successfully.

The facility exists to provide a minimum rank requirement for AH2 pilots joining the Virtual Airline. Any pilot applying must hold at least that rank in AH2 before they can send in an application.

Applications

Any applications to join your VA from the BBS will appear in the "Applications" tab.
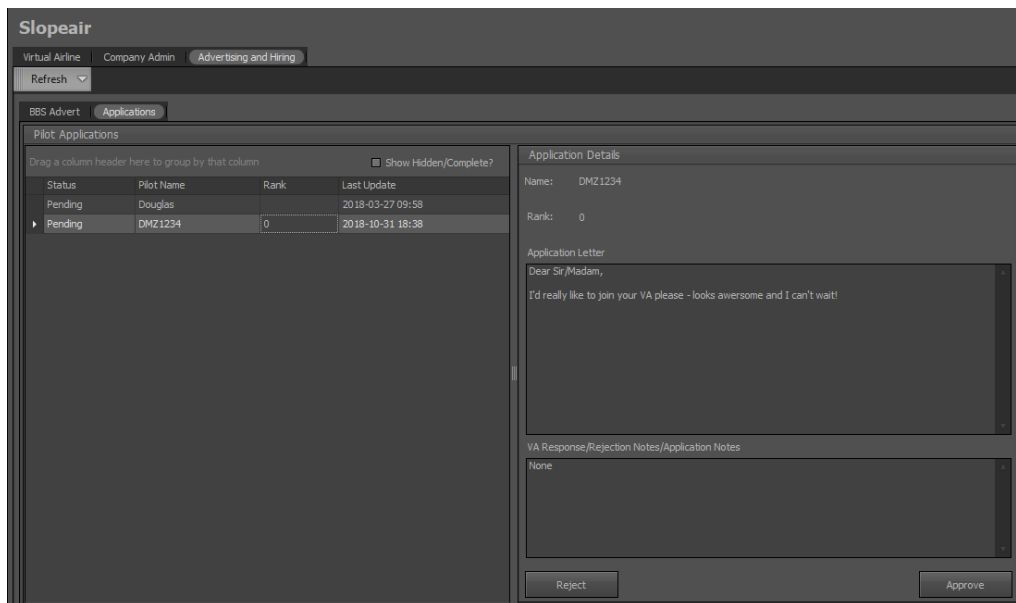
You can approve or reject a member's application from this section - select Reject or Accept as appropriate. To assign pilot to your Virtual Airlines, please us the "Approved "button in the bottom right of the Applications window.]

The process is the same for canceling a flight. Simply press "Approve" to cancel the players application - if you'd like to, you can enter a reason the application was rejects in the text box above - NB: this rejection will be sent to the user, so please post considerately.

8.7   VA Cargo Jobs and Pax Routes

Virtual airlines make money and gain reputation by flying cargo jobs, and passenger routes, just like in your normal AH2 company.

Cargo jobs can be transferred to the VA from your own job board in the **CARGO OPS, AVAILABLE JOBS** or **WORLD MAP** screens so you or others can fly them, or collaborate to complete them.

Passenger sectors can be scheduled and flown by any VA pilot, and must all be flown each week to ensure the schedule is kept up to date and running.

8.7.1   VA Cargo Jobs

Cargo jobs for your virtual airline are shown in the VA Cargo Jobs screen - you can access this screen from the **VA OPS, CARGO JOBS** menu item.
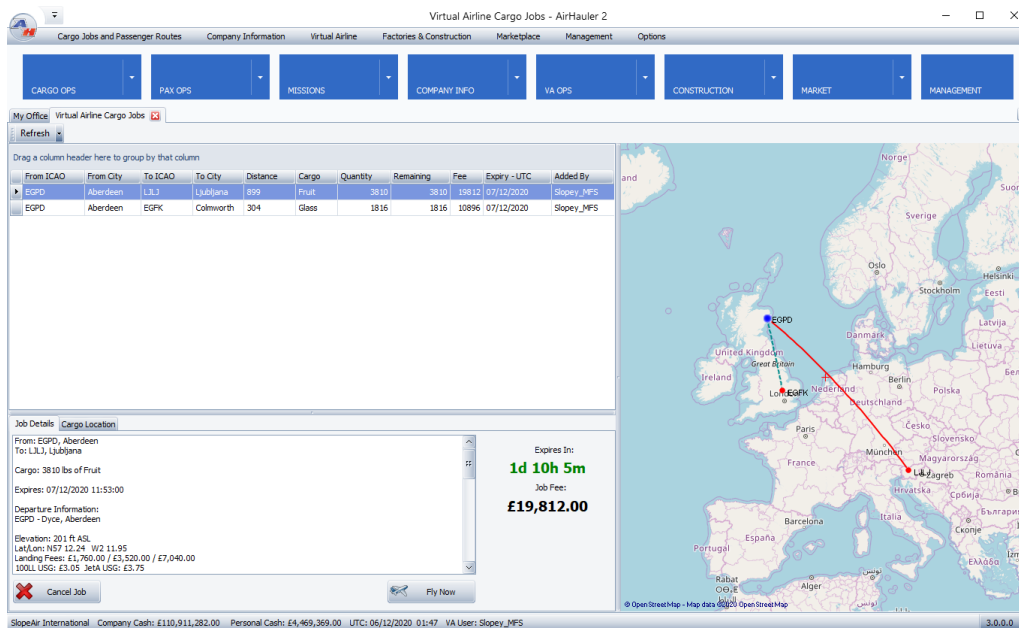
Flying VA Cargo Jobs

To fly one of the jobs, simply select the job and then click the "Fly Now" button. The fly now procedure for VA aircraft operates in exactly the same way as in your own company, and as described in the "Viewing Available Cargo Jobs 65 " topic.

Cancel VA Cargo Job

As with your own company, you cancel a job any time you wish, however, you will be penalised and you will loose reputation points in your VA. It can sometimes be more beneficial to arrive at the destination late, rather than canceling it all together.

Transferring Cargo jobs to your VA from your own Company

To transfer a cargo job to your VA (which you either are the owner of, or a member of), simply select the job from the **Overview Map** Jobs tab, or the **Available/Accepted Jobs** screen, and click "Transfer to VA".

Note that you need to have the appropriate permission set to transfer jobs so if you're not the owner of the Virtual Airline. The VA owner, or another member of the VA with permissions will be able to assign these to you on request.

That job can then be flown by any Virtual Airline member and the rewards for completing it are paid to the Virtual Airline, rather than your own Company. The job will be removed from your local job lists and moved to the Virtual Airline list when you transfer it.

8.7.2 **World Wide Jobs BBS**

The World Wide Job Board is a global list of many jobs which you can assign to your Virtual Airline - you can also access the World Wide Job BBS without a VA.

Rather than transfer jobs from your own AirHauler company, you can select from this master list and accept these jobs in the same way as transferred jobs. The World Wide job board is continuously regenerated, and it's worth consulting this job board if you find yourself without a backhaul from a particular airport.
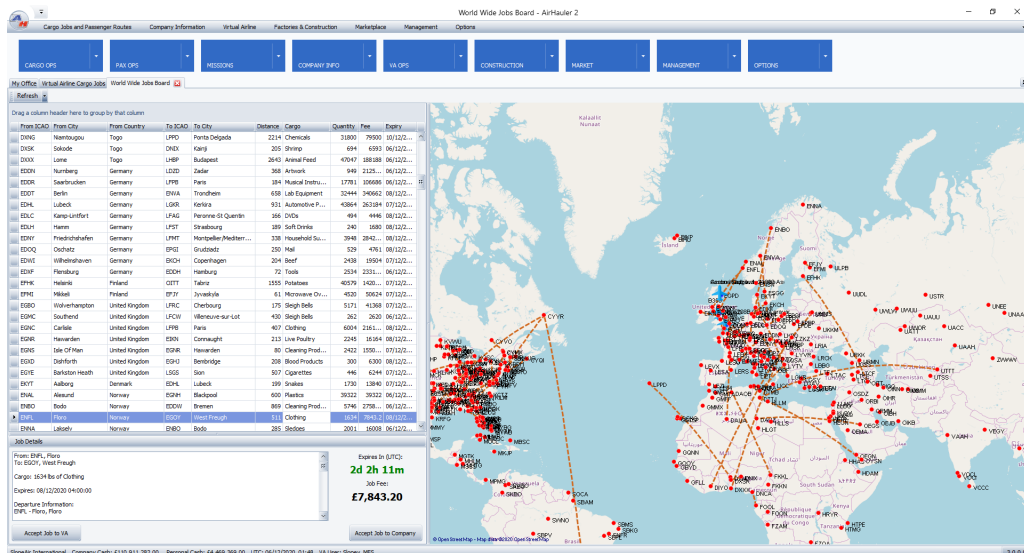
The jobs are available to all AH2 users who are members of, or own a VA, so if you see a nice simple job which you want to accept, choose it sooner rather than later in case a different VA or another pilot picks it up!

To accept a job to your VA, simply select the job first from the list provided. Then CHECK the airport criteria - is the airport long enough for the aircraft I want to take.

After you "Accept Job to VA", it'll appear in the VA Cargo Jobs screen, ready to be executed.

8.7.3   VA Pax Routes

Your Virtual Airline can operate passenger flights to different airports, on a weekly scheduled basis, or as ad-hoc flights. To undertake an ad-hoc passenger flight, simply set up an ad-hoc flight in the normal manner, but use a Virtual Airline aircraft to complete the flight (i.e. one you've booked out to yourself).

To set up a passenger schedule, or "route", click on the **VA OPS, PAX OPS** menu item in the main menu.

This will open the VA Pax Route screen from which you can create, remove, and fly passenger flights on behalf of your Virtual Airline (should you have appropriate permissions of course).
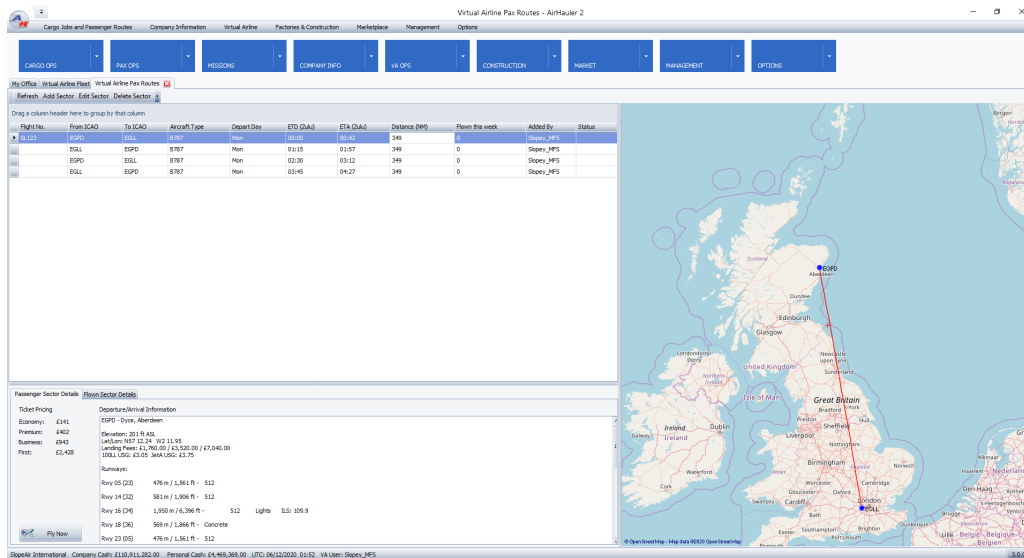
Flying a Passenger Flight

To fly one of the existing passenger flights, or "sectors", simply select it in the list, and click "Fly Now". You'll then be prompted for an aircraft to use for the flight - note that you can use a non-VA company aircraft to perform the flight if you wish, otherwise, you should Book out a Virtual Airline aircraft for the flight.

Once you have selected the sector and aircraft, the flight proceeds in the normal fashion as with any cargo/passenger flight in AH2 as described in the Flying Cargo and Passenger Flights [90] topic.

Note that there is no limit to how many times a flight can be flown in any one week, by any number of pilots. However, it is important that all

scheduled sectors are flown at least once, otherwise your VA will suffer a reputation penalty for un-flown flights (on a weekly basis).

Adding a New Sector

To add a new VA passenger sector, simply click on the "Add Sector" toolbar item. Note you need permission to do so if you are not the owner, or admin of a VA.

Passenger sectors **MUST** either arrive, or depart at a Virtual Airline Base. You will be prompted to select either the departure or arrival base for the flight.
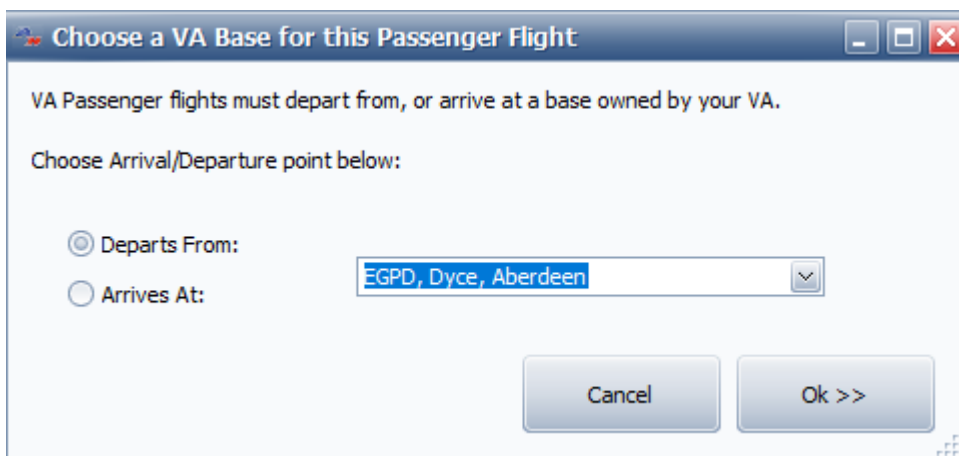
Once you have selected the departure or arrival location, click Ok to open the Add Route screen, which works in the same way as adding a passenger sector to a normal company with a few slight changes.
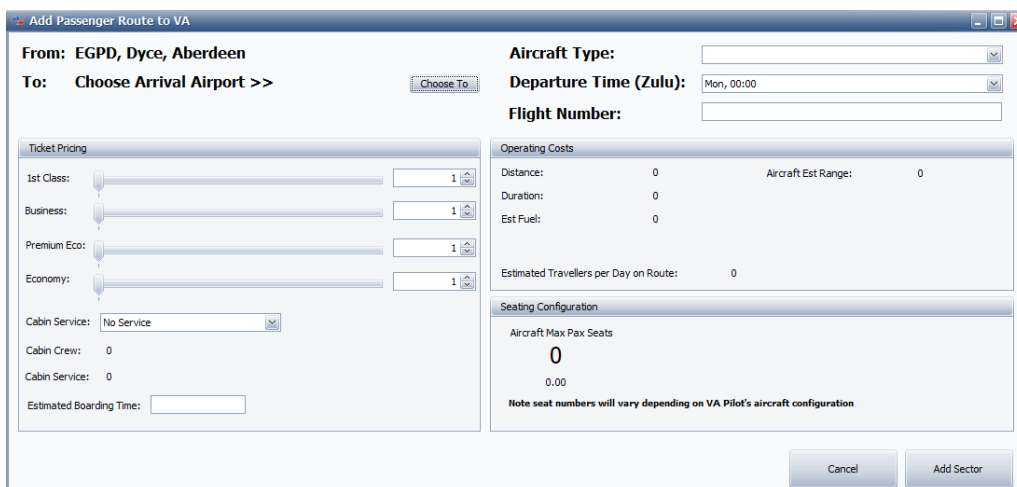
When this screen first loads, you notice that either the departure or arrival location is set to "Choose Arrival/Departure Airport >>>" depending on

which option you picked in the previous step. You should now select the appropriate arrival or departure airport using the "Choose To" button.

After both the departure and arrival airports have been set, you can then choose the aircraft type to operate this flight by selecting an aircraft type from your VA Fleet in the "Aircraft Type" drop down box in the top right of the screen.

Selecting an aircraft type will then populate the Ticket Pricing section where you can modify the ticket prices for all available classes. If a class is not available on the aircraft in question, leave the ticket price at 1. You can also select the type of onboard service level (which improves passenger satisfaction), and you can optionally give the flight a flight number in the Flight Number field in the top right.

Set the departure time for the flight **REMEMBERING THAT THE TIME IS IN UTC!**, and once you're happy with the configuration of the flight, click the "Add Sector" button.

Scheduling a Return flight

To make the scheduling of a return sector easier, you can right click on any flight in the sector list, and then select "Schedule Return Route" from the pop-up menu. This pre-populates the Add Route screen as above with the departure/arrival airports, aircraft type, and pricing as used for the outbound flight. You can then modify these values as necessary and add the route in a quick and efficient manner.

Deleting a Sector

To delete a VA passenger sector, click on the sector, and select "Delete Sector" from the top toolbar. You will be asked to confirm, and then the sector will be removed. Avoid removing sectors which pilots are currently flying as they will not be credited for the sector when they land if has been removed while they were in-flight.

8.8   VA Events Log

The VA Events log records every action which occurs in your virtual airline including all sales/purchase and other transactions, such as uploading jobs to the VA.

Open the events log from the **VA OPS, VA LOG** main menu item.

All ledger and tracking/event entries are shown in the grid, in descending order by default however they can be grouped and filtered in the normal way as with all AH2 grids. You can think of the VA Events screen as being the same as your Finance Ledger in your own company.

You can export the grid to Excel if you would like, and also clear the Event log down using the tool bar buttons at the top of the screen.
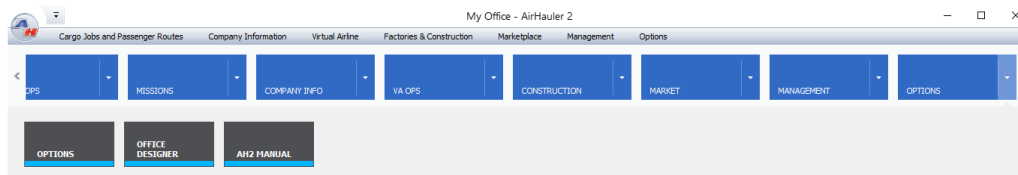
Options and Settings

9   Options and Settings

The Options Menu item allows you to change various settings and parameters within AirHauler 2.

From the main menu, you can change the user interface skin, open the main options page, and use the office designer to create a new "office" layout screen.

Options

The main Option page lets you change settings and configuration within AH2. See the AH2 Options [151] topic for more details.

Office Designer

When AH2 loads, you have the option of an "Office" screen which will appear on startup. The office can be used as a shortcut to different AH2 screens and functions - the default is an office looking over an airport apron. You are free to create your own layouts from the office designer. You can use an image as the background and create clickable zones over the image to access the functions.

AH2 Manual

This handy option opens the AirHauler 2 manual (the one you're reading now) in a electronic, searchable format.

Skins

You can change the user interface skin of the application from the skin chooser drop down. Unlike the other options in the menu, you must change this from the "old" style AirHauler 2 Menu bar. Click "Options" at the very top toolbar of AH2 to launch the old style menu system, then select "Skin Chooser".

Click the drop down arrow on the right side of the skin chooser drop down to view the available skins. You can then choose which ever skin you prefer for the user interface. Note that the skin changes the grid, menus and other interface components, but not the map views. Map view options are on the main option page.

9.1 AH2 Options

The AirHauler 2 options screen allows you to change several options.
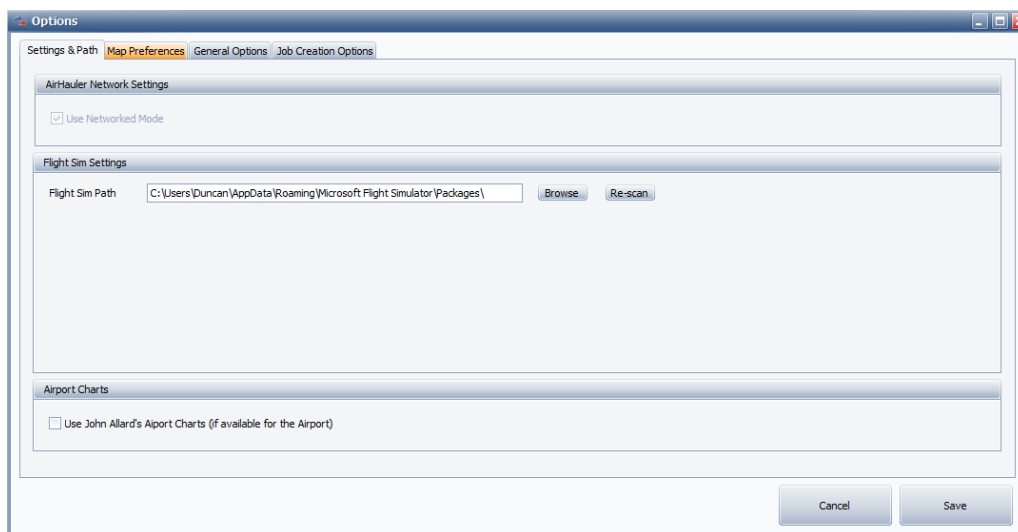
The screen is broken down into several tabs:

Settings & Path 152

Map Preferences 153

General Options 155

Job Creation Options 158

Each of the tabs is explained in detail in the following topics.

Also discussed is the use of <u>"Networked mode" and SimConnect</u> 152 which allows you either to run AirHauler 2 on a different machine from the simulator, or more commonly, to allow you to run AH2 in a mode which allows you to set up the flight manually and let AH2 connect when ready rather than starting the sim itself, which is required for some advanced aircraft add-ons.

9.1.1   Network/Manual Mode

Microsoft Flight Simulator does not currently allow a 3rd party application to launch a specific flight from the command line, hence AirHauler 2 for MFS is locked in what is know as "Network" or Manual mode.
 In this mode, AH2 will **not** attempt to start MFS for you but instead will wait until you have configured the simulator appropriately and connect once you have indicated the sim is running.

AirHauler Network Settings

☑ Use Networked Mode
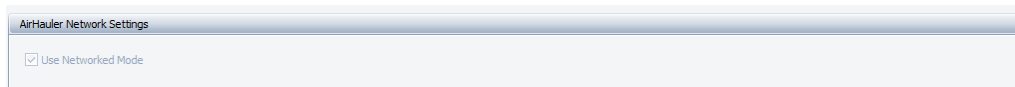
This also allows AH2 to be installed on a difference computer from MFS, provided you have SimConnect configured correctly for network based access.

Setting up SimConnect across a network is outwith the scope of this manual and many step by step tutorials are available on the internet to assist with the configuration. Note that AH2 does not need to be installed on the MFS machine itself if you are running AH2 on a different networked computer. Also note that AH2 does not use FSUIPC - AH2 communicates directly with MFS via SimConnect.

9.1.2   Settings & Path

AirHauler Network Settings - Networked Mode

Ah2 for MFS is permanently set to "network" mode. This allows you to start MFS yourself, and AH2 will connect once you have configured the sim appropriately. This is particularly useful for complex add-on aircraft which have their own loading routines or flight engines which will not allow them to be started automatically with the sim. Network mode is discussed in detail in the Network Mode topic. 152
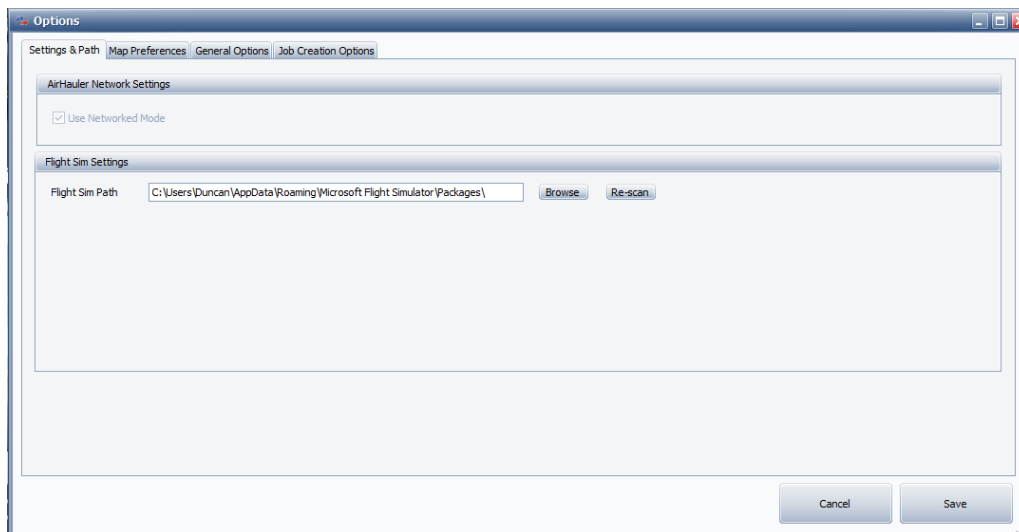
Microsoft Flight Simulator Settings

From this section you can change the path to the MFS packages director. This should be to the directory which contains the Official and Community folders.

Note that the path structure in MFS is very complicated and obscure. Please do not attempt to modify the path unless you understand which folders are accessible and which are not. If in doubt, you can use the "Re-scan" button which will search your PC for the appropriate MFS path, and set it automatically for you.

Should you reinstall or move your flight simulator, simply click "Rescan" and AH2 will find the new path to MFS, and then "Save" to save the new location.

9.1.3   Map Preferences

Map Settings

As previously mentioned, the map colours and tile sets used are not influenced by the UI skin chosen.

From this page, you can change the line colouring, style and width for paths and routes drawn on the map.
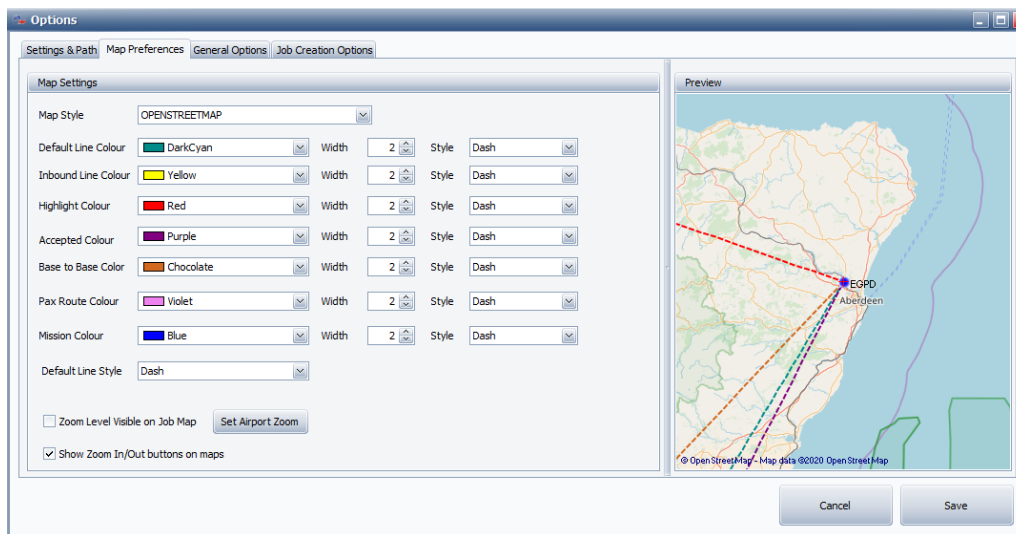
You can also choose the "Map Style" which selects which map provider you wish to load tiles from. Note that these maps are provided by 3rd parties, outwith the control of Just Flight and may or may not be available.

Selecting "Zoom Level Visible on Job Map" will show the current map zoom level for maps in the various AH2 screens.

For users who use screen reading software, or do not have a middle mouse wheel on their pointing device, you can enabled Zoom In/Out buttons on every map screen with the "Show Zoom In/Out buttons on Map" check box.

The zoom level and buttons are also useful to determine specific levels of zoom for the "Set Airport Zoom" feature.

Set Airport Zoom

For areas of the planet which have a high density of airports (especially North America), the Map display can become quite cluttered when zoomed out with airport markers and identification text overlapping. To assist with viewing the map, AH2 features a level of detail feature whereby only airports which are a certain size or above will be shown for a given zoom level.

The airport "size" is based on a number of factors including runways, gates and if there is an ILS system etc.

Airport size ranges from 0 (small, single runway dirt strips with no gates) up to 25 or so (very large international airports with many runways and gates).

For each zoom level (which you can see on the map using the check box already described), you can set the minimum size, so as you zoom out from the ground, only larger airports are shown.
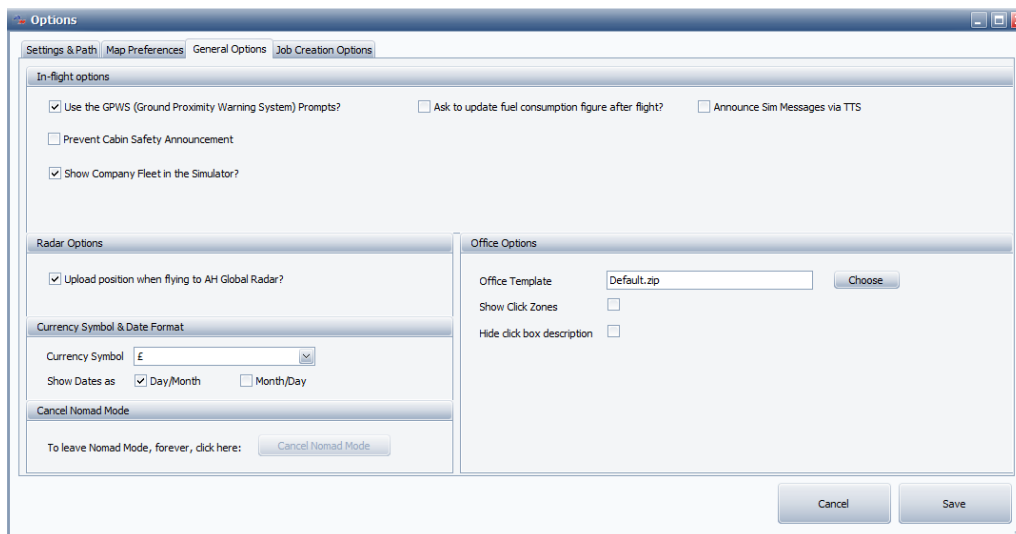

Note that the Zoom level works counter-intuitively, and that Level 17, the highest, is fully zoomed in. Maximum zoomed out (i.e. viewing virtually the whole map in the window) is Level 3.

9.1.4   General Options

In-Flight Options

Options which apply whilst flying in MFS are shown in this section.

Use the GPWS

AH2 will play Ground Proximity Warning System sounds as you approach the surface (i.e. 100, 50, 30, 20, 10 etc). These values are in Feet. Note that most larger add-on aircraft have their own GPWS callouts so you may want to disable this option if you are using mostly larger aircraft.

Prevent Cabin Safety Announcement

When taxiing for a passenger flight, AH2 will play a sound file for the cabin safety announcement. You can disable this feature from here. You will be able to supply your own sound files for the announcements in a future update.

Ask to update fuel consumption

Fuel consumption is set in the Aircraft Management section under the Aircraft Details option, however you may find that you have set this value incorrectly, or AH2 has suggested an incorrect value. When checked, this option will ask at the end of each flight if you would like to update the fuel consumption value shown in AH2 to the average value for the flight you have just flown.

Note the fuel consumption is used to provide the Endurance value (i.e. available flight time) for an aircraft, but has NO bearing on ACTUAL fuel consumption which happens within the Simulator itself.

Announce Sim Message via TTS

You can set AH2 to "say" any in-sim messages it generates while in flight. This uses the standard Microsoft Text to Speech functionality built into Windows.

Radar Options

You can select to upload your position when flying with AH2 to the Global AH2 Radar from this section. All pilots who upload their position are visible in the AH2 Radar if they do so. If you'd rather you didn't, simply uncheck the box. Note that this only displays your position on the AH2 Radar map, and is NOT multiplayer - you won't see other players in-flight in the sim unless you use some sort of 3rd party multiplayer service/session.

Currency Symbol

You can elect to choose a different currency symbol within the AH2 application if you wish. The default will be taken from your regional settings.

NB - there is no concept of exchange rate in AH2 - the currency symbol is cosmetic only, and the values will remain exactly the same regardless of which currency symbol you choose to be displayed in front of them.

Office Options

The Office Options section allows you to set the current Office Template (which you can create with the Office Designer), and also optionally show or hide the descriptions of click zones on the office screen, and the click zone boundaries themselves.

To set the current Office template in use, click "Choose", and select the appropriate zip file. AH2 ships with two office interiors by default - AH2.zip, which is the default office for any new companies, and Default.zip which is the Cargo Pilot style office for that nostalgic view! Office templates are stored in the AH2 program directory, in the "Office" directory, however you can select a zip file from anywhere you choose. See the topic on the Office Designer 160 for more detail about creating your own layouts.

Cancel Nomad Mode

If you've started a game in "Nomad Mode", and wish to revert to a standard "Career" style game (where you can own bases and aircraft etc), then click the "Cancel Nomad Mode" button. If you're not currently in Nomad Mode, the button will be disabled.

NB - THIS IS A ONE WAY SWITCH and cannot be reverted - if you leave Nomad Mode that company can never go back to it. Other nomad mode companies are not affected.

9.1.5   Job Creation Options

From the Job Creation options tab, you can influence cargo job generation in AirHauler 2 to a certain extent. Note that this is not a direct influence, and that some jobs will always be generated which are outside of these parameters, but they do give you some form of control over the process.

Also note that when changing the options regarding job creation, **the effects are NOT instant**. They will apply to jobs generated from that point onwards, so you may need to wait for some jobs to expire before new jobs conforming to the new settings are created.

AirHauler 2 generates jobs inline with your fleet's capabilities, however jobs are generated from a customer requirement perspective rather than to specifically suit your company. One of the main reasons that AirHauler was created is to get users flying to places they would not usually go. To that end, there is a high degree of variability in the jobs which Airhauler creates, and it will routinely create jobs which will be longer or larger than your aircraft's range and capacity.

You can undertake multiple flights to do these jobs however, and stop off at other airports en-route to refuel as required.

However it is up to you to ensure that the job is suitable, to and from airports which you can operate into and out of safely, and which have enough time remaining before they expire. AirHauler will NOT hold your hand in that regard, and it is possible to accept a job which cannot be completed - so be alert and read the job description!
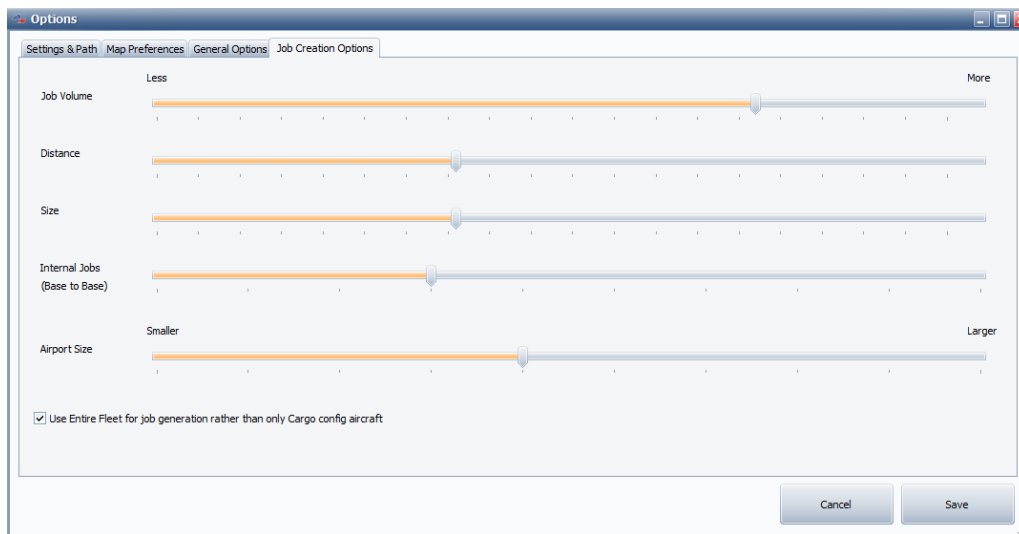
The slider controls on the tab allow you to change the various values which are explained below.

Job Volume - this slider controls the number of jobs generated. This value is also influenced by your company's reputation, the size of the airports where the jobs originate from, and also how often you visit your bases or airports. Note that if you do not visit a base regularly, jobs will not be generated from that base (as your customers simply assume that you no longer operate from that location).

Distance - the nominal distance for the job. For shorter jobs overall, set the slider to the left, and for longer jobs, to the right. The minimum distance which AirHauler will create a job for is around 30NM - under that distance, it will almost always be quicker to transport goods via road. Note that this value can be highly geographically dependant. If for example you open a base on a small island, where the nearest airport on the mainland is hundreds of miles away, having the distance slider set full to the left (i.e. smaller) may result in no jobs being generated as there are no destinations in range.

Size - influences the amount of cargo which a job involves. As regards job size and aircraft capacity, only weight is considered. It is assumed that the weight can be loaded within the aircraft regardless of physical constraints.

Internal Jobs (Base to Base) - this influences the number of jobs which are generated between your own bases. Note that such internal jobs do not gain as much reputation as cargo jobs to other airports, however if you would prefer to have jobs generated between particular bases, this will allow you to have more, or less of these jobs generated.

Airport Size - determines the destination airports for jobs. Size is dependant on the number of gates at an airport, the number of runways and other facilities available such as lighting or ILS systems.   Towards the left of the

scale are small regional strips and grass trips, and at the right hand end of the slider, international airports. As already mentioned, this influence the choice, but is not a hard limit, and jobs to small airports may still be generated even with the slider set to the full right position. It should be pointed out that geographical circumstances can cause this slider position to be critical - for example, if you open a base on a pacific island, around which there are no large airports within range of your aircraft, having the slider set full to the right would be counter productive (in the same way as the distance slider).

If in doubt, the best solution is to set the sliders to the middle position, and see what sort of jobs are generated, and then to adjust as necessary, but remember any changes will NOT be instantaneous.

Use Entire Fleet for Job generation other than only Cargo Config aircraft - if this setting is checked, then AirHauler2 will use your entire fleet's ranges and capacities when determining available jobs, and not only cargo aircraft. Note that if you have this setting unchecked, and your fleet consists only of passenger aircraft, **no cargo jobs will be generated!**

9.2   Office Designer

You can create your own office "layout" pictures for AirHauler 2, so you can customise the office screen wihch appears when you first load up AirHauler.

You can turn the option to load the office screen on or off through the Options menu, and also select which layout you want to use.

To create new layouts, use the Office Designer which is available from the Main Menu under the "Options" tab, and "Office Designer".
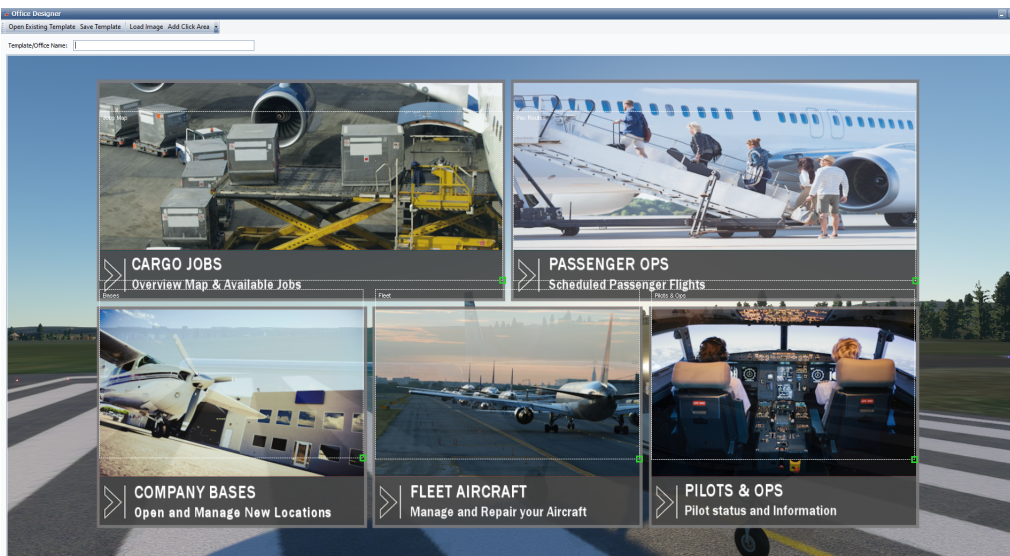
Office templates are stored as zip files, which include the background image for the office layout (in PNG format), and an XML file which contains the clickable zones for the image.

Creating a new Office Template

To create a new template, the first step is to load in an image via the "Load Image" button on the toolbar. Once you have an image loaded, you can then create "Click Zones" on the image which will open a particular AH2 screen or function.

To load in an image, click the "Load Image" button then select the image from the file browser. The image will then be loaded and displayed in the window.

Creating Click Zones

To create clickable zones within the Image, you need to add click areas via the top menu.

Each area can be mapped to a particular AH2 screen or function, and these are assigned when you create the area initially. To create a new clickable area on your image, click the "Add Click Area" button from the top menu.

This opens the "Click Zone Options" dialog which allows you to pick the Type of the click zone - i.e. the AH2 screen or function that clicking on this area will execute, and also if the area will open the screen as a floating window (rather than a tab), and if the screen should be maximised when it opens or not.
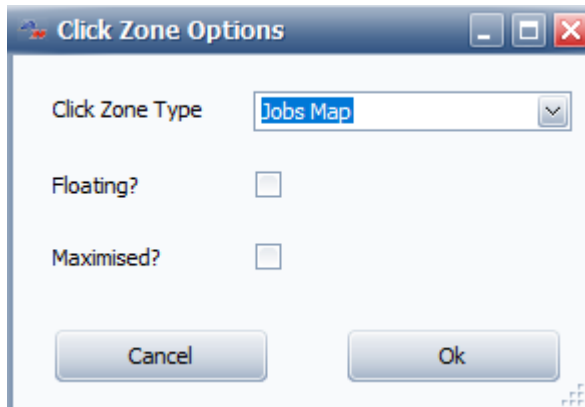
Once you have selected your choices, click "Ok" to add the clickable zone. This will create a new dashed outline item on top of your image.

The dashed area includes the name of the function in the top left of the area, and also a green resizeable box in the bottom right. To move the area around, click and drag anywhere in the area.
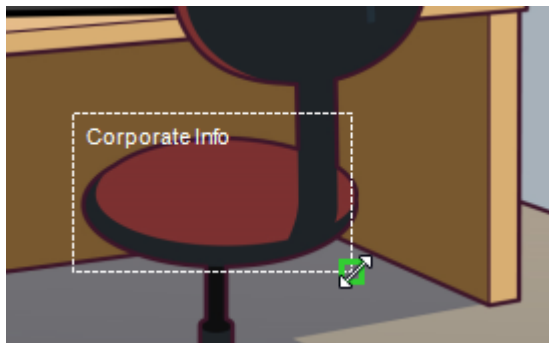
To resize the area, click and drag on the green box in the bottom right corner.

You can continue to add more click areas by selecting "Add Click Area" from the top menu until you have added all the functions/screens to the template image as necessary.

Saving the Template

Once you have added all the clickable areas you require, to save the template, ensure you have first entered at Template/Office Name in the field at the top. You can then set this new template to be the active template from the **Options screen** under **General Options.**

Aircraft, Scenery & Airport Management

10   Aircraft, Scenery & Airport Management

You can use your custom aircraft, and scenery within AirHauler 2.

New airports and aircraft can be imported, and airports or aircraft which do you not want to use, can also be removed from AirHauler. (Note this does not remove them from the Simulator, only AH2's own database).

You can manage aircraft, airports and scenery from the "Management" tab on the main menu.
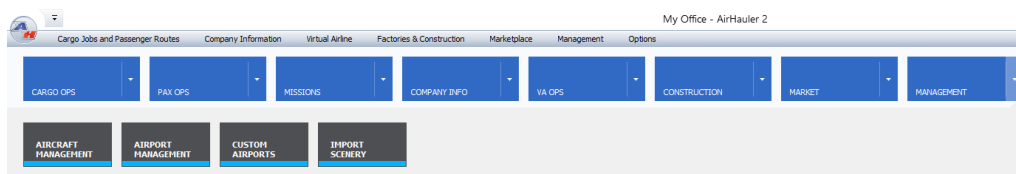
The AirHauler2 scenery and aircraft database is GLOBAL across all your companies (i.e. the same database is use for all companies).

The following sections describe each of the different functions:

- **Aircraft Management** 164

- **Airport Management** 170

- **Custom Airports** 173

- **Import Scenery** 175

10.1   Aircraft Management

The Aircraft Management screen shows all currently available aircraft within AirHauler2, and the ability to edit, delete and import new aircraft as required.

Importing New Aircraft

To import a new aircraft, click the "Import Aircraft" toolbar button. See the chapter on <u>Aircraft Importing</u> 166 for more details.

Deleting an Aircraft

You can remove an aircraft from the AirHauler 2 database by selecting one or more aircraft from the grid, and choosing "Delete Aircraft" from the menu. Note that this only removes the aircraft from the AirHauler 2 database - it does not remove it from the Simulator.

Note that you cannot delete an aircraft which is in use by one or more of your current companies.

Editing Aircraft Details

To change the values for any given aircraft, select the aircraft (or multiple entries if you wish to change several variants of the aircraft at the same time), and select "Modify Aircraft Data" from the top menu bar.

You will be presented with the Aircraft Details screen which will allow you to adjust the values in the same way as when you <u>import a new aircraft</u> 166. Please see the importing aircraft topic for more information.

Global Aircraft Database

Note that the aircraft database used in AirHauler2 is common across all companies.

10.1.1   Importing Aircraft

To import a new aircraft into AirHauler 2, click the "Import Aircraft" button from the menu on the Aircraft Management Screen.

You'll then see the "Import Custom Aircraft" screen as shown below
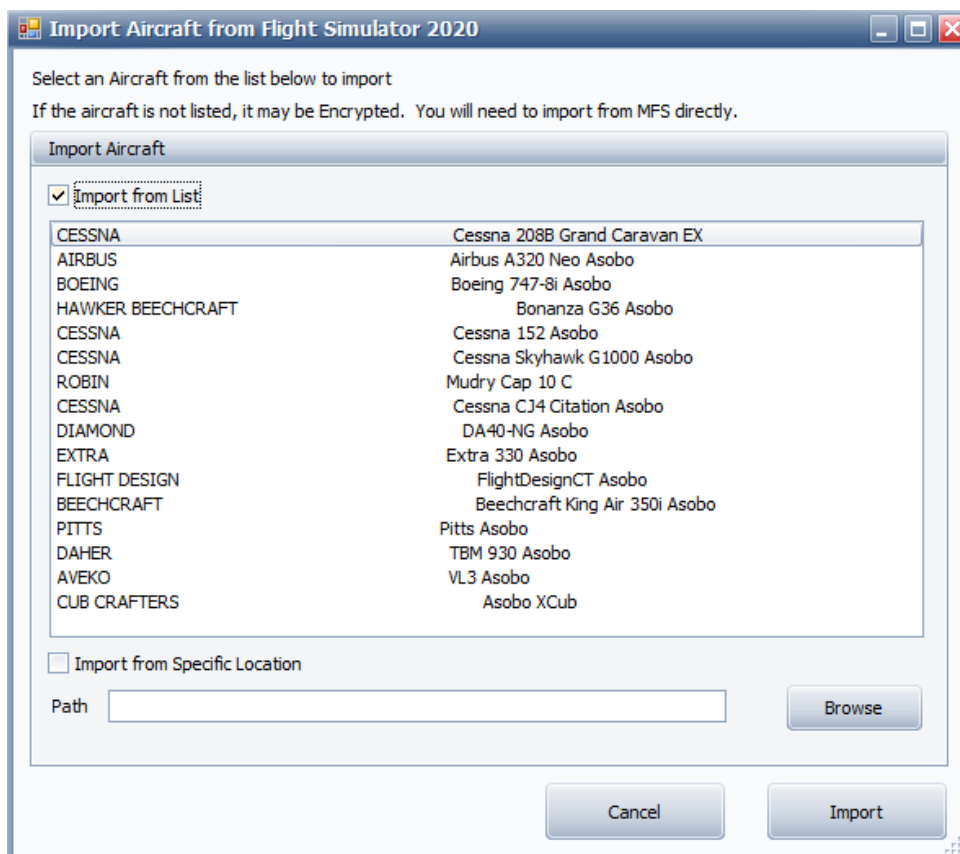
From this screen you can choose to import an aircraft either by selecting it from a list, or by choosing the aircraft.cfg file for that aircraft directly.

Importing Aircraft

The List box on the screen will show all aircraft present in MFS, but which have not yet been imported into AirHauler2. This list is populated automatically from the MFS Aircraft directories.

To import one the aircraft, select it from the list, and click the "Import" button.

Importing from a Specific Location

If the aircraft you want to import doesn't appear in the list, or you have an specific aircraft which you wish to import from a different location, you can manually provide the .acf file for AirHauler to import.

Select the .acf file for that particular aircraft using the "Browse" button. Once you've selected the .acf, you'll notice the "Import from Specific Location" checkbox is now ticked.

Then click the "Import" button to import that aircraft.

Aircraft Details

Once you have selected the aircraft to import, AirHauler will show you the "Aircraft Details" screen. Where possible, AirHauler will try and complete the fields for you with information from the .acf - file however many of these files do not contain the required values, and you will need to adjust them by hand.

All items are required, and you should pay special attention to the Range and Max Passengers fields. A brief explanation of the fields is included below:

Aircraft Description/Title - the title of the aircraft

Aircraft Type (set ONCE only) - this is the "type" of the aircraft. Note that all aircraft of the same type share a common "type rating". If the aircraft author has neglected to add the ICAO Type in the aircraft .cfg file, you may set it here. YOU CAN SET IT ONCE ONLY, and then it is permanently associated with that aircraft. If you then wish to change it, you will need to delete the aircraft from Aircraft Management and re-import it.

Cruise Speed (kts) - this is the cruise speed of the aircraft in knots, and is used to determine flight durations for flight planning and AI operations.

Range (NM) - the range of the aircraft, before refueling, in nautical miles. Note that if you set this value artificially high, or low, that will affect job generation. You can use this to influence cargo job generation to a certain extent by setting it lower if you'd prefer shorter jobs.

Fuel Consumption - the rate at which the aircraft consumes fuel in the cruise, in US Gallons per Hour. Note this value is only used in AirHauler itself to calculate endurance times, it does not affect fuel consumption in the actual simulator. You can optionally allow AirHauler to display the fuel consumption after a flight and update this value to obtain more accurate results. This is configured from the Options Screen under the "General Options" tab.

Max Passengers - this is the number of passengers which the aircraft can carry, in a single Economy seating arrangement, if configured as a passenger aircraft. Note that if this value is set to Zero, the aircraft can NEVER be used as a passenger aircraft in AirHauler 2. Also note that the maximum number of passengers is limited by the MTOW (Maximum Take-off Weight) of the aircraft - for some aircraft, this number may not match the real world capacity of the aircraft, but the limit is necessary to prevent some users for using artificially high passenger numbers in aircraft (i.e. a 500 seat Cessna 172!).

Flap Damage Speed - the speed (in Kts) above which the flaps will be damaged if extended. For aircraft which do not have flaps, set this value to zero.

Gear Damage Speed - the speed (in Kts) above which the landing gear will be damaged if extended. For aircraft with fixed gear, set this value to zero.

Requires Network Mode - some aircraft, such as complex add-ons may not tolerate being loaded by AirHauler directly into the sim. For these aircraft, you must start the simulator manually, load in the correct aircraft, and then

allow AirHauler to connect to the pre-configured sim. This method is explained in further detail in the "Network/Manual Mode" [152] chapter. Ticking this item will make AirHauler use networked mode for this aircraft, regardless of the global setting in options (i.e. you can leave Networked mode unchecked in options so that normal aircraft can be loaded directly, but specific aircraft will use networked mode without you having to change the global setting).

Once you have entered the details for your aircraft, click "Ok" to save the details.

Note that changes to aircraft details do not change aircraft which you currently own or lease in your fleet. If you wish to change the values of aircraft you currently operate in your company, you will need to sell/return those aircraft, and then re-buy or re-lease the aircraft with the new values.

10.2   Airports & Scenery

You can import new scenery areas and airports into AirHauler 2. This allows AirHauler to create jobs to and from these airports, and for you to open bases at these locations. This also populates the AirHauler database with the locations of parking gates so that your aircraft can be positioned correctly if you elect to start from a gate rather than the last position where you shut down the aircraft engines.

You can also add "custom airports" which are entries in the AH database for airports or particular locations for which there may not be a proper airport record in theMFS scenery database - this is especially true of some of the more "bush flying" style add-ons.

Within the Airports/Scenery menu items, you have the following functions:
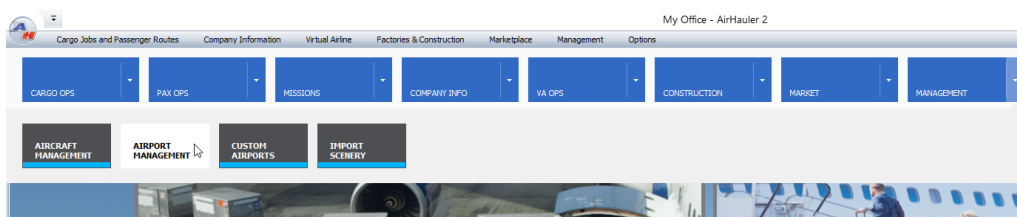
Airport Management - deactivate or reactivate airports. You can also remove co-located airport entries, and review the list of airports at which surface damage is ignored.

Custom Airports - add custom airport locations

Import Scenery - import scenery (including airports and gates) from the MFS scenery database

10.2.1   Airport Management

The Airport Management screen has two separate tabs: "Disabled Airports", and "Surface Damage Ignore Airports" which are each described below.
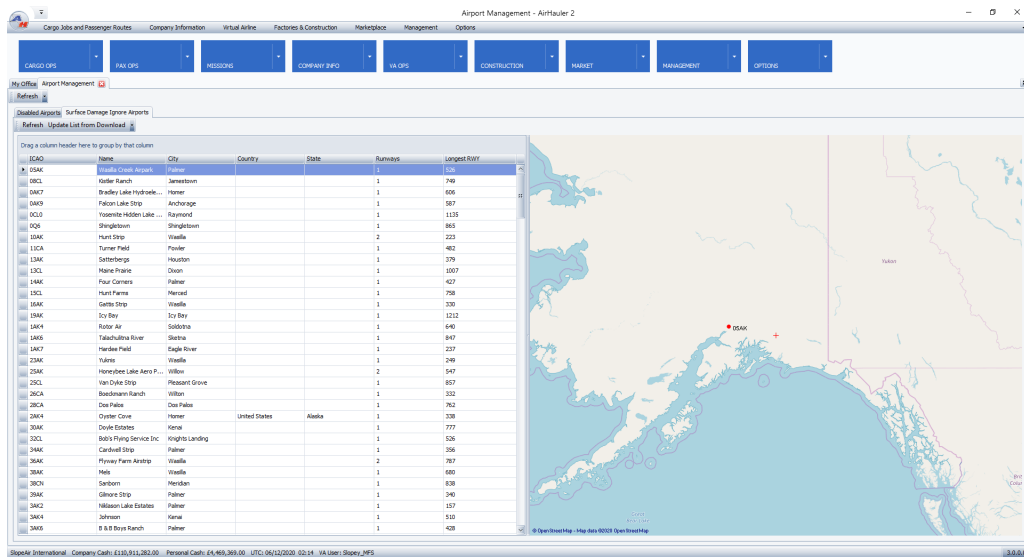
Disable Airports

You can disable certain airports from the AirHauler 2 database so they are not used for job generation. While disabled, you cannot create a base at these airports or land at those locations as you're effectively telling AirHauler to ignore them.

To add an airport to the "disabled" list, simply click "Add Airport" from the toolbar, and you'll be asked to enter the ICAO code for the airport. Assuming it is valid, the airport will be added to the disabled airport list.
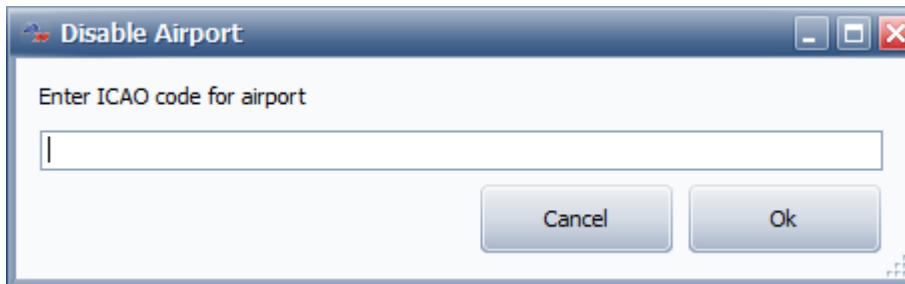
Should you wish to re-enable the airport (i.e. remove it from the list and make it active again), select it from the list, and click "Enable Airport (Remove from list)" and the airport will once again be able to be used within the program.

Scan for Co-Located

The "Scan for Co-Located" menu item opens a dedicated screen which allows you to search for airports which are located either very close to each other, or have multiple ICAO codes for the same airport. This is actually a common occurance in simulator airport databases, and is problematic for AirHauler as it can be difficult for it to determine which ICAO code you have arrived at. When this happens, it's usually necessary for you to taxi around the apron until you are closer to the reference point for one code than the other, and can be quite frustrating!

To resolve this situation, use the "Manage Co-Located Airports" screen.
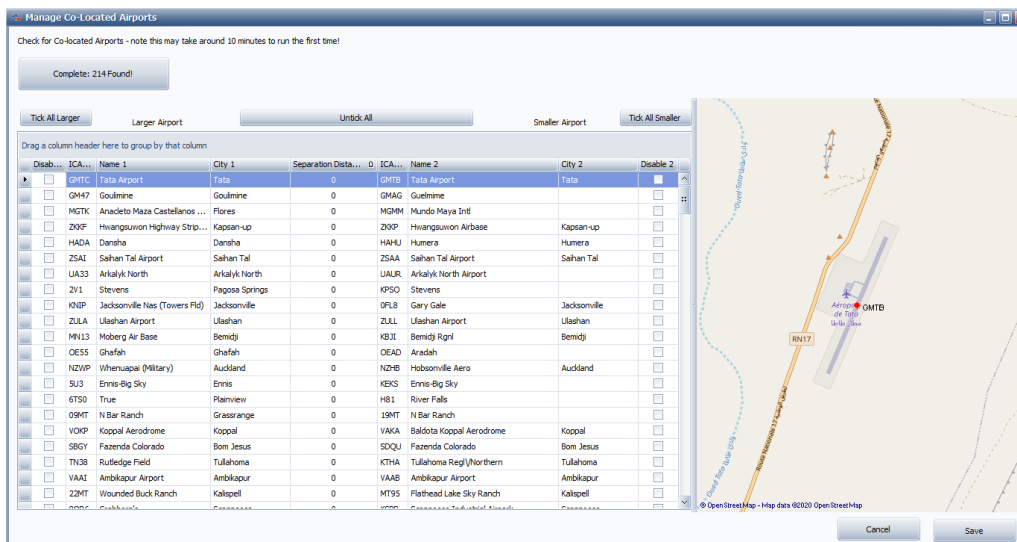
Click "Scan Airports" to begin the scan. AirHauler will check the enter database and list any airports which are within 2 NM of each other. The results will be displayed in the grid below, with the larger of the two airport codes listed on the left, and the smaller on the right. i.e. in the case of a

grass strip with an ICAO code, within the boundary of a large airport with a different ICAO code, the large airport will be on the left side, and the smaller grass strip on the right. Note that this search might take several minutes to complete.

Once complete, you'll see the separation distance between the airports on the left/right as the center column. By selecting a row on the grid, you'll be able to review the airport locations on the map to the right.

You can now choose which ICAO codes you want to disable, and you can do that by clicking on the check boxes on the Disable 1 or Disable 2 columns on either side of the grid.

If you'd like to keep the smaller airports only, then click "Tick All Larger". Conversely, if you'd like to disable the smaller airports, click the "Tick All Smaller".

Once you've decided which ICAO codes you wish to disable, click the "Save" button to save those results to the database. The disabled airports will be deactivate and will no longer show or be used in AirHauler 2.

Note that if your aircraft is marked as being at an airport which you've just deactivated, you may need to go into the sim and taxi the aircraft and then shut down the engines to allow AirHauler to pick up the new location. Alternatively, you can ask and AI pilot to move the aircraft and the position will be correct on landing.

Surface Damage Ignore Airports

Some modern scenery files do not actually create "runways" in the traditional sense. In these cases (particularly Orbx and Tongass sceneries), the runway is painted onto the terrain rather than telling the sim to create a runway at that location. This allows sloping runways and other airport representations which would be difficult to achieve if they were done via more traditional means.

This is problematic for AirHauler, because when landing, AirHauler wants to check which surface you've landed an aircraft on. Hopefully, that's a hard surface, or grass/gravel or even maybe water. However, when you land on one of these "texture" style runways, the underlying texture of the surface under the runway texture is reported - so you may get surfaces such as urban or forest.

Landing an airline on an Urban location or a Forest is less than desirable and will cause lots of damage normally, but in these cases, where you've landed was actually ok, and you shouldn't take any damage for doing so.

To get around this, AirHauler 2 uses a list of airports where surface damage is effectively ignored. This list is curated, and downloaded every time you start AirHauler to check for updates. You can review the list of airports from this Surface Damage list and you can also update the list from the AH2 server if required.

Also - when performing a scenery update, any airports who have a runway which is zero width will automatically be added to the exclusion list.
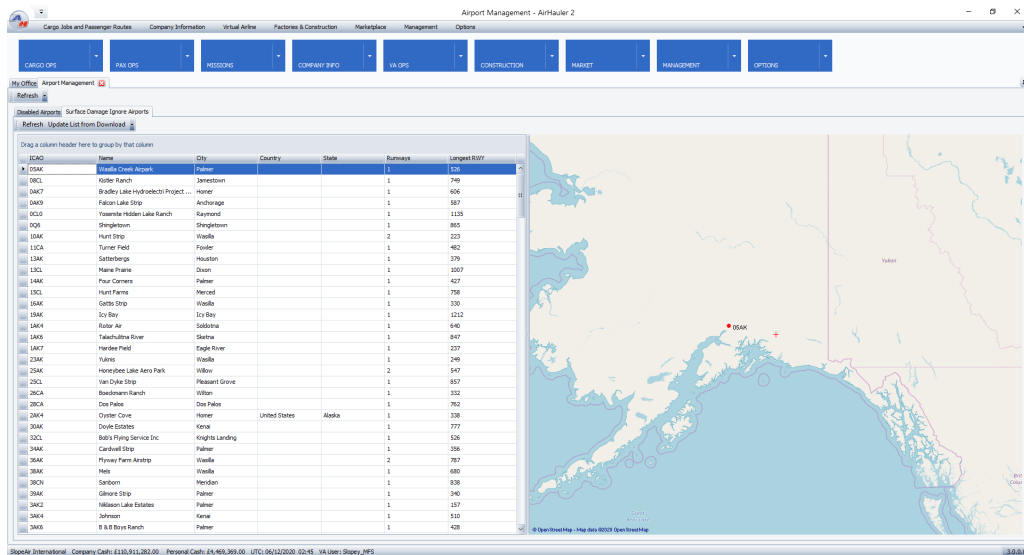
You cannot manually add airports to this (because it would allow everyone to add every airport and for landing damage to be irrelevant), but if you find an airport where you wrongly receive surface damage, please post on the AirHauler 2 forums at Just Flight, and they will be added to the list on a frequent update cycle.
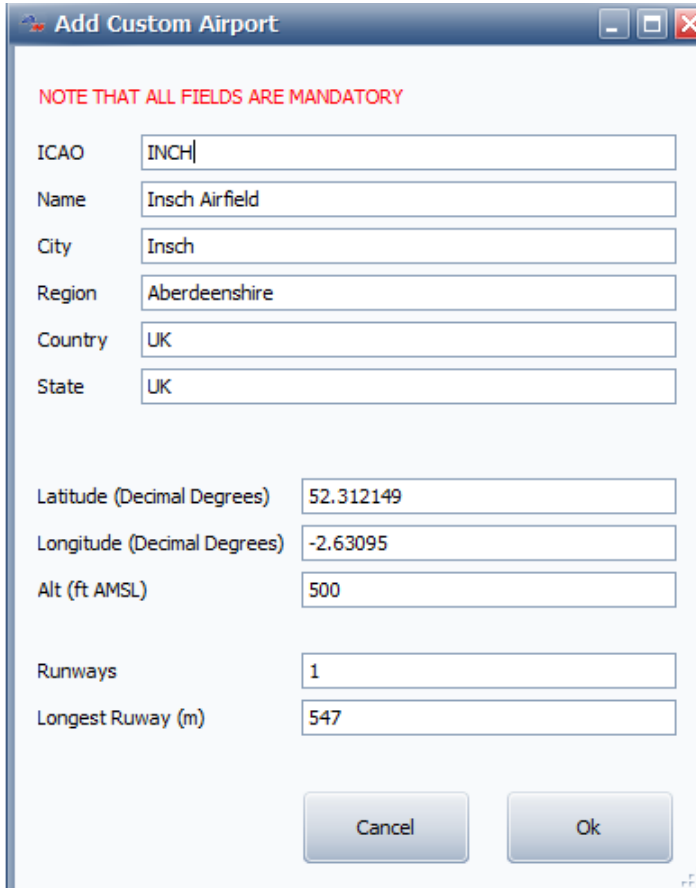
10.2.2   Custom Airports

On rare occasions, you may wish to tell AirHauler that there is an airport at a particular location which is not contained in the scenery files. Examples of these would be ad-hoc grass strips, or tundra strips in Northern Canada for example where you would like to drop supplies to a remote community - you may have scenery for that area, but which doesn't contain any proper airport details.

To achieve this, you can use the Custom Airports functionality.

By clicking "Add New Airport" you can add a new airport entry to the AirHauler 2 database, which will then be used as any normal airport. You will be asked for the details for that airport including the ICAO code (which you can create a fictious one if necessary), and other information.

Note that the Latitude and Longitude are in **Decimal Degrees** format. i.e. if I wanted to enter Insch Airfield in the UK, I would use Lat: 57.312051 Lon: -2.653117. You must also enter an Altitude, the number of runways, and the longest runway length in meters. Note that entering these incorrectly will cause issues when you try and fly there in AirHauler 2 so ENSURE they are correct.

Once you've completed the form, click "Ok" to add the airport.

You can Edit the details of the airport using the "Edit Custom Airport" toolbar button, and in the same way, you can remove the airport from the database with "Delete Custom Airport" if it is no longer required.

(Note that you shouldn't create custom airport entries for airports which can be imported by the standard Import Scenery functionality as that will result in duplicate airport entries)

10.2.3   Import Scenery

By default, the AirHauler database contains all the airports, gates and runways which ships with MFS and can be used immediately.

If you have added any custom scenery or airports to your MFS installation, to ensure that these are recorded properly within the database, you can use the "Import Scenery" function.

By Clicking "Import Scenery" you'll be presented with the following window:
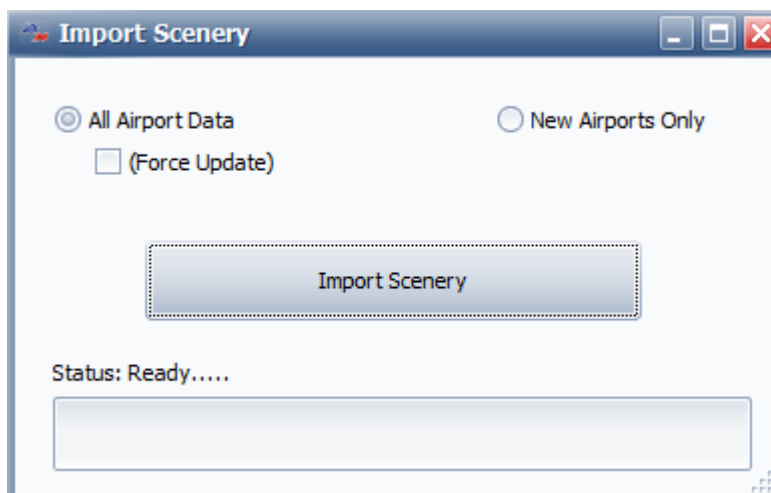
This includes a number of options:

Include Default Scenery

If you choose Include Default Scenery, the entire scenery database will be regenerated.

Note that the import process can take a while to complete.

Include Custom Scenery Packs

Include Custom Scenery Packs will make AH2 import any custom scenery which MFS is aware of, without importing the full Default Scenery information (and will therefore be much faster).

Importing after uninstalling scenery from MFS

Note that if you have removed scenery from MFS and you are importing to now remove those airports from AirHauler 2, ensure you have no aircraft parked at those airports!

FAQ & Troubleshooting

11   FAQ & Troubleshooting

I've updated AirHauler 2, and my company has vanished!

This is usually caused by installing AH2 in a different location than you had installed it previously. The uninstall process for AH2 cannot remove your company files or Static database file, so they will still be available in the previous AH2 directory. Search your computer for "Static.db", and that will be located in the path you previously installed AH2. You can either copy the static.db and company folder to the new install location, or re-install AH2 in the previous location as normal.

When flying passenger flights, boarding is always in 4000+ minutes

This indicates that you have the time and date set wrongly inMFS. Remember that all passenger operations use UTC time, never local. Also remember that the sim can sometimes set the date incorrectly (+/- 1 day) itself - check the in-simulator time to ensure it matches the time and date of the flight. Please see the topic on UTC times and passenger flights 75.

How can I back up my AH2 company?

Company files are stored in: C:\Users\<user name>\AppData\Roaming\AirHauler2FS

To back up your company, copy the company file (or files) from the Company folder in that directory, and also the Static.db file from the AirHauler2FS directory itself. If you keep the static and company files safe, you will always be able to restore back if required. To restore, simply copy the files back into the appropriate directories. Note however that the Static file is global across ALL companies, so if you back up the static database, then import 5 aircraft, and restore from a previous copy of that file, the newly imported aircraft won't be in the database (AH2 will warn you that this is the case, and you will need to re-import them).

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