

# VAM

## Virtual Airlines Manager

Version 2.5



[www.virtualairlinesmanager.net](http://www.virtualairlinesmanager.net)

[www.simacars.net](http://www.simacars.net)

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## 1. What is VAM?

VAM (Virtual Airlines Manager) is a manager of virtual airlines, the goal is to provide a tool for the creation, management and maintenance for virtual airlines websites.

The pilot groups who want to create a virtual airline in a simple way with VAM have an ideal tool to instantly create the web and the management system without any programming skills.

VAM is not focused only on civil aviation, also can be used in military aviation.

VAM is divided into two parts:

- VAM CORE: is the core of the system lies the functionality of the main entities of the system: pilots, routes, aircraft routing, etc. This part is directly related to the administration of the VA, so only accessible by users who are administrators or staff.
- VAM: website where lies all the functionality unrelated to the administration except airline flight validation and jumping part.

YouTube link for system explanation

<https://www.youtube.com/channel/UCa77cf44LNhjB8GVrrM5jaw>

## 2. Contact

The web for VAM is [www.virtualairlinesmanager.net](http://www.virtualairlinesmanager.net). For questions, bug report or customization of the system send an email or use the forum. In case of issues please read the FAQ in the forum before post your issue. Most probably the same issue you have has been treated in the forum and a solution has been provided.

- [admin@virtualairlinesmanager.net](mailto:admin@virtualairlinesmanager.net)
- [admin@pilotovirtual.net](mailto:admin@pilotovirtual.net)
- [www.virtualairlinesmanager.net/foro](http://www.virtualairlinesmanager.net/foro)

### 3. VAM modules

The VAM system consists of the following modules:

- VA administration :
  - VA global parameters: define global parameters used in the system, the parameters affect the VA behavior.
  - Hubs manager.
  - Fleet manager.
  - Route manager.
  - Route & Fleet assignation.
  - Pilot manager.
  - User type manager.
  - Rank manager.
  - Email configuration: configure the welcome email message for new pilots and define emails address that will have copy of the email sent automatically by the system
  - Flights validator.
  - Jumps validator.
  - NOTAMS manager.
  - Event manager.
  - Languages manager.
  - VAM ACARS flight rating manager.
  - Financial manager.
  - Tours manager.
  - Awards manager.
- Pilots functionalities:
  - Registration of new users/pilots.
  - Managing user profile including pilot picture.
  - Password recovery.
  - Flight report (charter or regular)
    - Manual flight report
    - VAM ACARS: new ACARS developed by me, fully integrated with VAM
    - FS Keeper.
    - FS ACARS. From version VAM 2.2 FS ACARS is not recommended, it is much better to use the new VAM ACARS. New functionalities will not added to FS ACARS within VAM since VAM 2.2
  - Reserve routes.
  - Internal messaging.
  - Financial system based on flights / jumps performed.

## 4. Requirements

Software and hardware requirements:

- Hosting or dedicated server.
- PHP 5.5 or greater
- MYSQL Server database.
- Ability to upload files to your hosting via FTP or Web-FTP

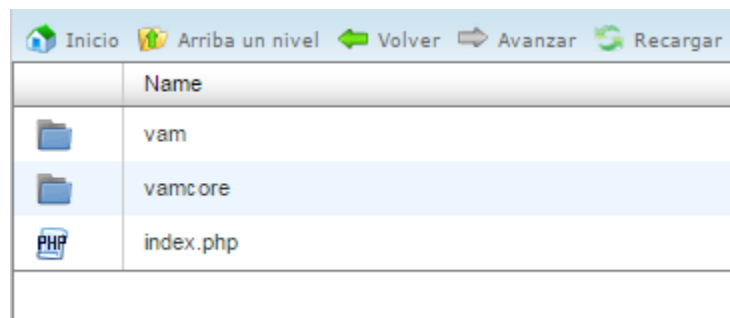
## 5. Installation




The zip you downloaded contains the following files:

- index.php
- vam folder with public web part and pilot functionality. Contains files php, js, css, images
- vamcore folder with the core system administration. Contains files php, ctp, js, css, images
- Data\_Base\_Scritps/db\_schema.sql: sql file with the structure of the database.
- Data\_Base\_Scritps/db\_data\_1.sql , db\_data\_2.sql, db\_data\_3.sql, db\_data\_4.sql, db\_data\_5.sql: sql files with the minimum data to initialize the VAM system. Apply them in order via phpMyAdmin
- VAM documentation in English.
- Version.txt

VAM installation is very simple, just follow these steps:

1. Create a MYSQL database
2. Run the script db\_schema.sql in your data base to create the tables and views
3. Run the scripts db\_data1.sql , db\_data2.sql , db\_data3.sql , db\_data4.sql and db\_data5.sql in your data base to initialize the VAM system.
4. Upload to your hosting FTP the folders vam and vamcore and index.php both folders must be at the same level.



	Name
	vam
	vamcore
	index.php

5. Change the connection string to your database, this must be done in the following files:
  - vam\db\_login.php
  - vamcore\app\Config\database.php

6. Change the email sender for administration panel functionalities. Some emails are sent from the administration panel, these emails must pass by the cakephp framework, it is mandatory that you modify a file and put your email (a valid email from your hosting). The file to be edited is in **vamcore\app\Config\email.php**

You must edit the line 42: change that email address and your VA email address (leave the quotes)

'from' => **'admin@virtualairlinesmanager.net'**,

```
37  */
38  class EmailConfig {
39
40      public $default = array(
41          'transport' => 'Mail',
42          'from' => 'admin@virtualairlinesmanager.net',
43          'charset' => 'utf-8',
44          'headerCharset' => 'utf-8',
45      );
46  }
```

7. Edit your index.php outside vam folder and put the correct default language. For example if your default language is Spanish put this: Location: ./vam/index.php?lang=es in line 2

```
1  <?php
2      header( 'Location: ./vam/index.php?lang=es' );
3      exit();
4  ?>
```

With these simple steps you have installed VAM, remember to point your domain to VAM file /index.php which is the entry file to the system.

After installation there is a user created: the first thing to do is to edit this user and then change the password. This user will be the first pilot but also an administrator. You can change the callsign without any problem, you can adapt it to your company.

**Callsign: vam100**

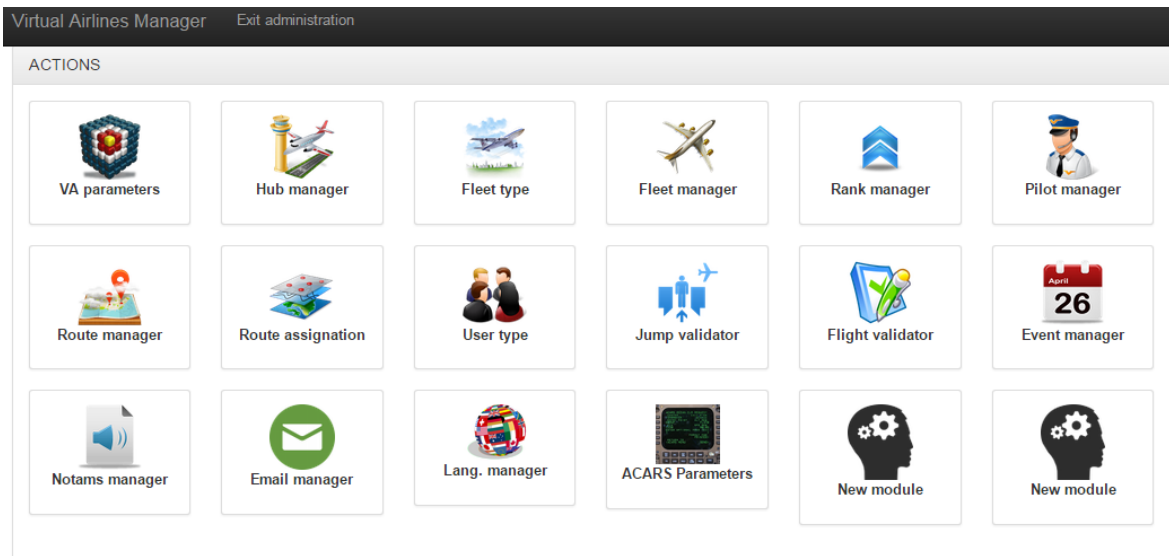
**Password: 123456**

## 8. VAM administration

The VAM administration module is the core of the system, it is programmed based on the architectural pattern called MVC (Model-View-Controller).

Administration module is accessed if the following conditions are met:

- The user must be logged in and validated in VAM.
- The user must be assigned to the user type Administrator. This type of user is in the default installation of VAM and is very important not to remove from the system. (user\_type=3 in table gvausers).



## 9. Administration entities

### i. VA Global parameters

It is mandatory the existence of a single record in the table `va_parameters`, this register contains the main parameters governing the behavior of the system. The list of parameters is the following:

- VA name.
- Airline ICAO.
- IVAO: Defines whether the VA operates in IVAO.
- VATSIM: Defines whether the VA operates in VATSIM.
- Number allowed pilots: maximum number of active pilots. If the number of active pilots reaches this value the option of registering new pilots is disabled.
- Cost jump type 1: price for jumps type 1. For example when the pilot moves as a passenger to and from the same country.
- Cost jump type 2: price for jumps type 2. For example when the pilot moves as a passenger to and from the same continent.
- Cost jump type 3: price for jumps type 3. For example when the pilot moves as a passenger to and from different continent.
- Plane Status Hangar: defines the status of the aircraft when passing to maintenance mode. If the status of an aircraft is less the value of the parameter the plane pass to the maintenance mode and may not be used until after X days defined in another parameter (see Maintenance Hangar Days).













- Landing Crash: defines the VS (vertical speed) which is considered an accident on landing, the aircraft moves to the hangar and may not be used until after the days defined in another parameter (see Hangar Crash Days).
- Landing Penalty 1: Defines the aircraft wear based on the vertical speed in the touch down See section aircraft wear (chapter 9).
- Landing Penalty 2: Defines the aircraft wear based on the vertical speed in the touch down See section wear aircraft. 3: Define wear level 3 aircraft based on the VS landing. See section aircraft wear (chapter 9).
- Landing VS Penalty 1: vertical speed affecting the Landing Penalty 1.
- Landing VS Penalty 2: vertical speed affecting the Landing Penalty 2.
- Flight Wear: fixed aircraft wear for each flight.
- Number days for plane maintenance: number of days for aircraft's maintenance.
- Cost for repair an aircraft after crash: cost for the VA in case of crash. Impact in finance module.
- Number days after crash: number of days needed to repair an aircraft after crash.
- Pilot Crash Penalty: economic penalty when a pilot crashes a plane.
- Charter\_reduction: percentage of salary reduction if the flight is charter.
- Currency: eur, dollar, pound ...
- No Count Rejected: if value YES is selected VAM will not count rejected flights. This affects VA and pilot flight and hour counters. Data is not deleted. If value NO is selected VAM will recalculate counters.
- Pilot Public: if value YES is selected VAM will allow non registered users see pilots and flights information.
- Allow Select Aircraft for Charter: if value YES pilots will be able to use aircrafts from fleet for charter and regular flights. This is possible only using SIM ACARS and based on the pilot location, certifications and free aircrafts in that location.
- Activate Finance Module: if value YES the financial module and calculations is activated. More information in finance module chapter.

## ii. Hub manager

Creates Hubs and then assign pilots to a hub. A hub may contain more than one pilot but a pilot can only be assigned to a hub.

## Hubs

Hub	Web	Actions
Madrid	<a href="http://www.allmetsat.com/es/metar-taf/espana-portugal.php?icao=LEMD">http://www.allmetsat.com/es/metar-taf/espana-portugal.php?icao=LEMD</a>	  <a href="#">Delete</a>
Dubai	<a href="http://es.allmetsat.com/metar-taf/asia.php?icao=OMDB">http://es.allmetsat.com/metar-taf/asia.php?icao=OMDB</a>	  <a href="#">Delete</a>
Buenos Aires	<a href="http://es.allmetsat.com/metar-taf/argentina.php?icao=SAEZ">http://es.allmetsat.com/metar-taf/argentina.php?icao=SAEZ</a>	  <a href="#">Delete</a>
Lima	<a href="http://es.allmetsat.com/metar-taf/peru.php?icao=SPIM">http://es.allmetsat.com/metar-taf/peru.php?icao=SPIM</a>	  <a href="#">Delete</a>
Valencia	<a href="http://www.allmetsat.com/es/metar-taf/espana-portugal.php?icao=LEVC">http://www.allmetsat.com/es/metar-taf/espana-portugal.php?icao=LEVC</a>	  <a href="#">Delete</a>





Page 1 of 1, showing 5 records out of 5 total, starting on record 1, ending on 5



Since VAM 2.5 the pilots, aircrafts and routes are assigned to a HUB. This information is aggregated in the HUB page outside the administration panel.

Madrid Barajas International Airport


### HUB PILOTS


Callsign	Name	Location	Hours	Rank	Country	Status
VAM100	Administrador VAM	LEAL	0.95	New Hire		
VAM200	Javi López	LEBL	2.64	First Officer		

### HUB FLEET

Tail Number	Type	Location	Hours	Status
EC-LUH	Airbus A319	LEMD	1.64	90
EC-KAG	Airbus A319	LEBL	1	95
EC-KKE	Airbus A319	LEPA	0	100

### HUB DETAILS



**Name**  
Madrid Barajas International Airport  


**Website**  
[Link](#)

**Number of Pilots**  
2

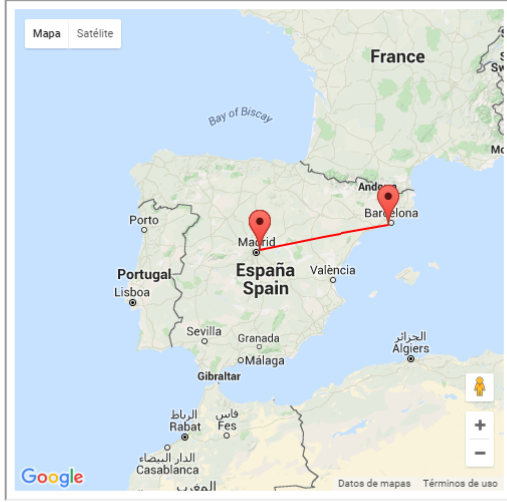
**Number of Aircrafts**  
3

**Number of Routes**  
2

### HUB ROUTES

Flight	Departure	Arrival
VAM1000	LEMD	LEBL
VAM1010	LEBL	LEMD

### ROUTES MAP



### iii. Fleet type

Create and manage the aircrafts models for the VA. The fleet type is used by the following entities:

- Aircraft certifications for pilots: a pilot can be certified to fly more than one aircraft type, it influences in booking scheduled flights (explained in another section).
- Routes and fleet type assignation. A route can be assigned to more than one aircraft type. For example the route Madrid - London (LEMD-EGLL) can be flown by an A320, a B738 or a MD82.

#### Fleet types

Plane Icao	Plane Description	Actions
A320	Airbus 320-200	  <a href="#">Delete</a>
A330	Airbus 330	  <a href="#">Delete</a>
B738	Boeing 738	  <a href="#">Delete</a>
B773	Boeing 773 ER	  <a href="#">Delete</a>
B58	Beechcraft 58	  <a href="#">Delete</a>

Page 1 of 1, showing 5 records out of 5 total, starting on record 1, ending on 5



New parameters has been added in VAM 2.5 , new attributes can be added to the fleet type.

Fleet Type	
Plane ICAO	A319
Type Description	Airbus A319
PAX	125
Cargo capacity	8500
Length	120m
MZFW	61500
MLW	51000
MTOW	66500
Service ceiling	41000
Cruising Speed	M78
Crew Members	5
Image url	<a href="http://barrieaircraft.com/images/airbus-a319-06.jpg">http://barrieaircraft.com/images/airbus-a319-06.jpg</a>
Price	85000000


**IMPORTANT:** PAX, cargo capacity (in weight units) and price will affect the financial module calculations.

The information about fleet type is applied to all aircraft for the same type and it is visible in the aircraft details:

#### AIRCRAFT DETAILS



Name  
Luarca

Location  
LEMD  
 Madrid Barajas International Airport

Hub  
LEMD  
 Madrid Barajas International Airport

Type  
Airbus A319

Hours  
1.64

Booked  
Free

Status  
90

Number of PAX  
125

Maximum range  
3500

Cargo capacity  
8500

Aircraft length  
120m

Maximum zero-fuel weight (MZFW)  
61500

Maximum landing weight (MLW)  
51000

#### FLIGHTS FOR AIRCRAFT WITH TAIL NUMBER EC-LUH

Date	Pilot	Callsign	Flight	Departure	Arrival	Distance	Fuel
07-10-2015	Javi López	VAM200	CHARTER	LEMD	LEBL	293.4	2628.09
08-10-2015	Javi López	VAM200	VAM1010	LEBL	LEMD	278.5	2803.29















#### iv. Fleet manager

Create, edit and delete aircrafts. Each aircraft must be associated to an aircraft type (Fleet type).

The **Booked** attribute indicates whether the aircraft is reserved by a pilot.

The **Hangar** attribute indicates whether the aircraft is in maintenance or repair mode. In this mode the aircraft cannot be used.



##### Fleet

Plane Icao	Registry	Location	Hours	Status	Booked	Name	Base	Hangar	Actions
B738	ECKHB	EGLL	0	100 %	No	British Columbia	EGLL	No	  <a href="#">Delete</a>
B738	ECHDB	EGLL	0	100 %	No	Alaska	EGLL	No	  <a href="#">Delete</a>
B738	ECHJF	LEBL	4.35	100 %	No	Sogn og Fjordane	LEMD	No	  <a href="#">Delete</a>
A330	ECHAX	LEBL	0	100 %	No	Nordland	LEBL	No	  <a href="#">Delete</a>
A330	ECJYR	LEBL	0	100 %	No	Eyjatfjallajkull	LEBL	No	  <a href="#">Delete</a>
A330	ECJBB	LEBL	0	100 %	No	David Bowie	LEBL	No	  <a href="#">Delete</a>
A330	ECJDB	LEBL	0	100 %	No	Snfellsjkull	LEBL	No	  <a href="#">Delete</a>

#### v. Rank Manager

Manages the ranks associated with the pilots, each rank has salary per flight hour. The rank affects the salary of the pilot.

##### Ranks

Rank	Salary Hour	Minimum Hours	Maximum Hours	Actions
New Hire	100	0	100	  <a href="#">Delete</a>
First Officer	250	101	500	  <a href="#">Delete</a>

Since VAM 2.5 administrator do not need to update the rank for each pilot. This is done automatically during the reports validation. The ranks are revised by the system and assign the rank based on the flight time validated each pilot has.









































## vi. Pilot Manager

Pilot's management:

- Activation of new pilots: new registered pilots have the callsign **\_NEW\_** . To activate a new pilot change the callsign and assign the **Activation** as Active. VAM system will send automatically an email to the pilot with the new callsign assigned.
- Rejection of new pilots: press **Delete** button.
- Inactivate a pilot: press **Inactivate** button. An inactivated pilot cannot enter into the system but it can be activate again if needed.
- Administrators can transfer hours from previous system adding a value in the field **Transferred Hours**

**IMPORTANT:** to keep the historical data it is recommended to do not delete a pilot with reported flights.

### Pilots

Callsign	Name	Surname	Last Visit Date	User Type	Rank	Hub	Location	Status	Actions
VAM100	Administrador	VAM	2015-02-12 20:38:19	Administrador	New Hire	Madrid	LEMD		   
VAM222	Alejandro	García	2015-02-14 10:46:11	Staff	Captain	Dubai	LEBB		   
VAM200	始皇帝	中华人民共和国	2015-02-08 21:06:26	Piloto	First Officer	Dubai	LEMD		   
VAM201	Álvheiði	Orinbjörn Arnbjörn	2015-01-29 06:03:02	Piloto	New Hire	Dubai	EBBR		   
VAM203	شجر طلع نمره	جاسم	2015-02-13 17:26:27	Piloto	Senior Captain	Dubai	OMDB		   
VAM401	Raul	Noriega	2015-02-03 00:55:36	Piloto	Captain	Dubai	LEMD		   
VAM411	Luis	Fernandez	2015-02-02 00:05:04	Piloto	New Hire	Madrid	LEMD		   
VAM252	Julian	Rodriguez	2015-02-12 19:10:09	Staff	First Officer	Madrid	LEVC		   

## vii. Route Manager

Create, edit or deleted the VA's routes. A route is associated with one or more type of aircraft. The values of fuel, price and PAX have not any functionality. In a future release of VAM they will be used in the financial system of the VA.

Since VAM 2.5 routes are associated to a hub.

Route	
Flight	VAM1000
Departure	LEMD
Arrival	LEBL
Alternative	LERS
ETD	1200
ETA	1305
PAX Price	95
Cargo Price	2
Route	PINAR UN870 PONEN UT600 CASPE
Flight Level	FL 280
Comments	
Duration	1
Hub	LEMD















#### Actions

[Edit Route](#)
[List Routes](#)
[List Fleet Type](#)
[New Route](#)
[New Fleet Type](#)
[Delete Route](#)

### viii. Routes-Fleet Assignment

VAM system does not associate a particular aircraft to a route, VAM is more flexible because allows to associate an aircraft type to a route. For example the route EGLL-OMDB can be associated to the fleet type B777 and A330, it means that any B777 or A330 can fly this regular route.

#### Fleet Type & Routes




Route	Fleet type	Actions
VAM1101	B738	  <a href="#">Delete</a>
VAM1101	A320	  <a href="#">Delete</a>
VAM1102	A320	  <a href="#">Delete</a>
VAM1103	A320	  <a href="#">Delete</a>
VAM1104	A320	  <a href="#">Delete</a>
VAM1105	A320	  <a href="#">Delete</a>
VAM1106	A320	  <a href="#">Delete</a>



## ix. User Type

Create, edit and delete user types. Each pilot is associated to a user type (role): Administrator, pilot, staff ... There is a default user type in the system that must not be deleted under any circumstances: the type of admin user is user\_type = 3 in gvausers table.

### User Types

User Type	Actions
Staff	  <a href="#">Delete</a>
Piloto	  <a href="#">Delete</a>
Administrador	  <a href="#">Delete</a>

Since VAM 2.5 new administration levels can be created, for example you can create a user type that can only access to the route and fleet management. Other administration modules will be locked. This is done via switching on / off the security functions for each user type.




See below an example:

## Edit User Type

Staff	User Type
No	Access Va Parameters
No	Access Hub Manager
Yes	Access Fleet Type Manager
Yes	Access Fleet Manager
No	Access Rank Manager
No	Access Pilot Manager
Yes	Access Route Manager
Yes	Access Route Assignator
No	Access User Type Manager
No	Access Jump Validator
No	Access Flight Validator
No	Access Event Manager
No	Access Notam Manager
No	Access Email Manager
No	Access Language Manager
No	Access Vam Acars Manager
No	Access Financial Parameters
No	Access Tour Manager






















## x. Jump Validator

To validate jumps click on the jump type you want to associate. Read VA parameters chapter for more information about jump cost.

JUMPS VALIDATION						
Callsign	Departure	Arrival	Date	Jump type 1	Jump type 2	Jump type 3
VAM222	LEZG	LEMD	2015-02-13 18:46:32			

## xi. Flight Validator

Allow validate or reject flights reported by any method (manual or via ACARS). In this page tours legs reports can be also validated.

FLIGHTS VALIDATION								
Callsign	Departure	Arrival	Date	Duration	Distance	Type	Action	Log
VAM222	EIDW	ENGM	2015-02-07 22:24:11	1.70	731	Charter	 	
VAM222	LEMD	LEIB	2015-02-07 16:17:03	0.70	252	Charter	 	
VAM222	LEMD	LESA	2015-02-07 13:43:16	0.40	93	Charter	 	
VAM222	LEMD	LEBL	2015-02-07 13:38:55	0.80	261	Charter	 	
VAM222	LEMD	EKCH	2015-02-07 13:38:28	2.30	1,148	Charter	 	
VAM222	LEMD	EBBR	2015-02-07 13:37:45	1.70	710	Charter	 	
VAM222	WARR	WSSS	2015-02-07 13:33:23	1.80	799	Charter	 	

Validators can add comments:

**VALIDATION COMMENTS**







**COMMENT**

FLIGHT DETAILS					
Pilot:	VAM222 Alejandro García	Aircraft:	PMDG 777-31HER EMIRATES (1000TH 777)	Distance:	3366NM
Departure	LEMD	Arrival	OMDB	Duration	7.03
Validation	Pending Validation	Type	Charter	Registry	A6-EGO
ZFW	205882	Block Fuel	132,219	Flight Fuel	51,090
Passengers	278	Cargo	15000	Alternate	OMSJ
Departure Time	1145	Cruise Speed	465	Flight Level	FL370
Flight Type	IFR	Aircraft Type	B773	Weight Unit	Kg
Date	2015-06-13 20:46:17	Pilot Comments	TEST LONG HAUL	Network	OFFLINE
Crashed	No	Validator Comments		Flight Rating	63

- Add comment: just add a comment
- Accept: add the comment, validate the flight and perform the payment to the pilot.
- Reject: add the comment and reject the flight.

## xii. Event Manager

Create, edit, or delete events. Events are displayed on the home page of the website. The events will be visible if the current date is between the dates “publish date” (date when the event is visible) and “hide date” (date on which the event is hidden).

Events				
Create Date	Publish Date	Hide Date	Event Name	Actions
2015-01-27	2015-01-27	2015-01-28	Event One	  <a href="#">Delete</a>
2015-02-03	2015-02-03	2015-02-04	Event FEB 2015	  <a href="#">Delete</a>
2015-02-03	2015-02-04	2015-02-05	Event FEB 2015	  <a href="#">Delete</a>

Page 1 of 1, showing 3 records out of 3 total, starting on record 1, ending on 3

«
»

## xiii. Notams Manager

Create, edit, or delete NOTAMS. NOTAMS are displayed on the home page of the website. The NOTAMS will be visible if the current date is between the dates “publish date” and “hide date” (date on which the NOTAM is hidden).

NOTAMS	
NOTAM	Date
NOTAM 1	07-02-2015

## xiv. Email manager

You can create templates for the welcome email when a user registers into the system. Mail is sent and a copy will be sent also the CEO and staff email address defined in the email manager.

**IMPORTANT:** by default the value for the staff email is [vamrrh@virtualairlinesmanager.net](mailto:vamrrh@virtualairlinesmanager.net) , in some hosting there is a validation of the email address, please change these email addresses to correct ones based on your hosting. Use your own emails address.

**IMPORTANT:** some emails are sent from the administration panel, these emails must pass by the cakephp framework, it is mandatory that you modify a file and put your email (a valid email from your hosting). The file to be edited is in **vamcore\app\Config\email.php**

You must edit the line 42: change that email address and your VA email address (leave the quotes)

'from' => **'admin@virtualairlinesmanager.net'**,

```
37  */
38  class EmailConfig {
39
40      public $default = array(
41          'transport' => 'Mail',
42          'from' => 'admin@virtualairlinesmanager.net',
43          'charset' => 'utf-8',
44          'headerCharset' => 'utf-8',
45      );
46  }
```

## xv. Languages manager

VAM is a Multilanguage system, each registered user can select a language. The initial VAM installation provides two languages (English and Spanish) but you can add as many languages as you need. Follow the next steps to add new languages:

- In the administration panel add a new language

### Add Language

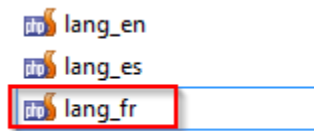
Language Name

File Suffix

Submit

In this example we are adding the French language.

- Add a new file called lang\_fr . The name of the file must be lang\_ and the suffix. In this case lang\_fr.php



It is recommended to copy the lang\_en and rename based on the suffix for the new language.

- Now simply translate all the labels in the new file:

```

1  <?php
2  // NavBar options
3  define ('ABOUT' , 'About ');
4  define ('PILOTS' , 'Pilot Roster');
5  define ('FLEET' , 'Fleet');
6  define ('ROUTES' , 'Routes');
7  define ('STAFF' , 'Staff');
8  define ('RULES' , 'Rules');
9  define ('SCHOOL' , 'School');
10 define ('REGISTER' , 'Register');
11 define ('FORUM' , 'Forum');
12 define ('LANGUAGES' , 'Language');
13 define ('LANGUAGE_ES' , 'Español');
14 define ('LANGUAGE_EN' , 'English');
15

```

- Add a new row for your new language:

```

define ('LANGUAGE_EN' , 'English');
define ('LANGUAGE_FR' , 'Francais');

```

## xvi. ACARS parameter manager and flight rating (added in VAM 2.3)

Since VAM 2.3 and SIM ACARS 1.2.0 administrators can set up rules to perform an automatic flight rating. Depending on the flight failures some percentages are discounted. The final result will be based on the discount applied per each type of failure. The discount per failure type is set up from the Administration panel (ACARS Parameters).

[Virtual Airlines Manager](#) [Exit administration](#)

**Edit VAM ACARS Parameters**

<input type="text" value="100"/>	Crash
<input type="text" value="5"/>	Beacon Off
<input type="text" value="15"/>	Ias Below 10000 Ft
<input type="text" value="10"/>	Lights Below 10000 Ft
<input type="text" value="10"/>	Lights Above 10000 Ft
<input type="text" value="25"/>	Stall
<input type="text" value="15"/>	Overspeed
<input type="text" value="5"/>	Pause
<input type="text" value="25"/>	Refuel
<input type="text" value="100"/>	Slew
<input type="text" value="5"/>	Taxi Lights
<input type="text" value="7"/>	Taxi Speed
<input type="text" value="10"/>	Takeoff Lights
<input type="text" value="10"/>	Land Lights
<input type="text" value="5"/>	Incorrect Arrival
<input type="text" value="0"/>	Landing Vs 0 100
<input type="text" value="1"/>	Landing Vs 100 200
<input type="text" value="5"/>	Landing Vs 200 300
<input type="text" value="10"/>	Landing Vs 300 400
<input type="text" value="15"/>	Landing Vs 400 500
<input type="text" value="18"/>	Landing Vs 500 600
<input type="text" value="25"/>	Landing Vs Greater 600

**Submit**

The list of parameters is:

- Crash detected
- Beacon light off while engines are running
- IAS >250 below 10.000 FT (actually the failure is detected at 260 KIAS)
- Lights below 10.000 FT: landing light off
- Lights above 10.000 FT: landing light on
- Stall
- Over speed
- Pause
- Refuel (detected if increments or decrements is bigger than 500 units)
- Slew done in the simulator
- Taxi lights off while taxi
- Take off lights: landing lights off while taking off
- Land lights: landing lights off while landing
- Incorrect arrival: pilot landed in a different airport from the planned one.
- Landing VS 0 100: penalty for landing at vertical speed between 0 – 100 ft/min
- Landing VS 100 200: penalty for landing at vertical speed between 101 – 200 ft/min
- Landing VS 200 300: penalty for landing at vertical speed between 201 – 300 ft/min
- Landing VS 300 400: penalty for landing at vertical speed between 301 – 400 ft/min
- Landing VS 400 500: penalty for landing at vertical speed between 401 – 500 ft/min
- Landing VS 500 600: penalty for landing at vertical speed between 501 – 600 ft/min
- Landing VS greater 600 : penalty for landing at vertical speed > 601 ft/min











## xvii. Financial manager (added in VAM 2.5)

In versions previous to VAM 2.5 there was a very basic financial system only related to the income for the pilots based on the flight hours and the “jump seats” done.

From VAM 2.5 a complete, flexible and configurable financial module is available. By default this module is not active. To activate the module go to VA Parameters and select “YES” to activate it.

From the date and time your financial module is activated all the flight reports inserted in the system will be affected by the financial parameters. Previous flights will not be part of the financial calculations, the reason of this is because some internal changes has been done in system, in any case I will provide some files as a software upgrade for VAM 2.5 to perform financial calculations based on the data already inserted in the system.

### Financial Parameters

Parameter Active	Financial Parameter	Amount	Is Cost	Is Profit	Actions
Yes	Airport Taxes	200	YES	NO	  <a href="#">Delete</a>
Yes	Meal on board	8	YES	NO	  <a href="#">Delete</a>
Yes	Extra charge	5	NO	YES	  <a href="#">Delete</a>
Yes	Fuel	0.5	YES	NO	  <a href="#">Delete</a>

### Actions

[New Parameter](#)

### Edit Financial Parameters

<input type="text" value="Yes"/>	Parameter Active
<input type="text" value="Airport Taxes"/>	Financial Parameter
<input type="text" value="200"/>	Amount
<input type="text" value="Yes"/>	Is Cost
<input type="text" value="No"/>	Is Profit
<input type="text" value="No"/>	Linked To Time
<input type="text" value="No"/>	Linked To Pax
<input type="text" value="No"/>	Linked To Distance
<input type="text" value="No"/>	Linked To Fuel
<input type="text" value="Yes"/>	Linked To Flight

You can create as many financial parameters as you want, there is no restriction.

#### Creation and editing financial parameters

- Parameter active: You can switch ON/OFF a parameter when you want, those ones with value NO (inactive) will not be part of the financial calculations.
- Financial parameter: Is the name of the parameter, for example "Meal for passengers" , "Aircraft cleaning" , "Publicity on board" ...
- Amount: value used to calculate. Use always positive values, do not put negative values.
- Is Cost: Put as YES if the parameter is accost of the VA. For example "Meal for passengers"
- Is Profit: Put as YES if the parameter is accost of the VA. For example "Publicity on board"
- Linked To Time: Put as YES if the parameter is linked to the flight time, in this case the amount will be multiplied by the flight duration.
- Linked To Pax: Put as YES if the parameter is linked to the number of passengers, in this case the amount will be multiplied by the number of passengers.

- Linked To Distance: Put as YES if the parameter is linked to the flight distance, in this case the amount will be multiplied by the flight distance.
- Linked To Fuel: Put as YES if the parameter is linked to the fuel burned, in this case the amount will be multiplied by the fuel burned in the flight.
- Linked To Flight: Put as YES if the parameter is **not** linked to the flight duration, number of passengers, fuel burned or distance. If YES it will be applied to any flight.

You can combine all those settings as you need, there is not restriction, I did not add any restriction for the possible combinations, just to make a very flexible module. But make sure you set up the financial parameter correctly. In my opinion the same parameter should not be cost and profit at the same time.

Example of use:

Parameter Active	Financial parameter	Amount	Is Cost	Is Profit	Linked to Time	Linked to Pax	Linked to Distance	Linked to Fuel	Linked to Flight
YES	Airport Taxes	200	YES						YES
YES	Ground Handling	500	YES						YES
YES	Meal on board	10	YES			YES			
YES	Publicity	1000		YES					YES
YES	Engine wear	700	YES		YES				
YES	Fuel	0,38	YES					YES	
YES	Wi-Fi connection	750	YES		YES				YES
YES	Extra charge	5		YES		YES			

The financial calculations are executed only for those flights with date & time greater than the date & time of the financial module activation and with status validated.

This calculation is executed when the flights validation is displayed. So when a validator is accepting a report when he/she comes back to the validation page the calculation will be done.

The financial calculations are done for flights reported via VAM ACARS, FS Keeper and manual report. FS ACARS is no longer supported in VAM for new modules due to VAM ACARS are the right alternative (free and much better than FS ACARS).

Example of calculation for a regular flight reported with VAM ACARS:

- LEMB-LEMD
- Duration 0.85 h
- Distance 278 NM
- Fuel 2803 Kg
- PAX: 135
- Cargo 5500 Kg

Since VAM 2.5 each route has a price per pax: in this case 80, also a price per cargo weight unit, in this case 11.

Remark: price per pax and cargo is only affecting regular routes, because a charter flight has not stored this information because there is no route.

## Routes

Flight	Departure	Arrival	Alternative	Etd	Eta	Pax Price	Cargo Price	Duration	Hub	Actions
VAM1010	LEBL	LEMD	LEZG	1530	1630	80	11	0.95	LEMD	  <a href="#">Delete</a>

### Costs for flight:

- 200 (Airport Taxes)
  - 500 (Ground Handling)
  - 750 (Wifi)
- Subtotal 1450

### Costs for PAX:

- 135 x 10 = 1350 (Meal on board)
- Subtotal 1350

### Costs for time:

- 0.85 x 700 = 595 (Engine wear)
- Subtotal 595

### Costs for fuel:

- 0.38 x 2803 = 1065.14
- Subtotal 1065.14

TOTAL COSTS= 4.460.14

### Profit for flight:

- 1000 Publicity
- Subtotal 1000

#### Profit for PAX & Cargo:

- 135 x 5 = 675
  - 135 x 80 = 10800
  - 5500 x 11 = 60500
- Subtotal 71975

TOTAL PROFIT= 72975



TOTAL BALANCE= 72975– 4460.14 = 68514.86

If you are using the payment for pilots that is implemented in VAM since version 2.0 that amount will be affected by the pilot salary. For example if the pilot has a salary (based on his/her rank) of 200 per hour, the salary for the pilot will be  $0.85 \times 200 = 170$

So the final result of the flight will be an income for the VA of  $68514.16 - 170 = 68344.86$

In order to provide more reality to the financial module when new aircrafts are inserted in the fleet it means a cost for the VA. The cost for each aircraft is configured in the fleet type. In this case an A319 has a cost of 85.000.000

### Fleet types

Plane Icao	Plane Description	Pax	Crew Members	Cargo Capacity	Unit Price	Actions
A319	Airbus A319	125	5	8500	85000000	  <a href="#">Delete</a>

So any time you add an A319 to your VA it will affect the VA finances in 85.000.000

There is a VA parameters affecting the finance module: “Cost for repair an aircraft after crash”: cost for the VA in case of crash

Each flight has associated a financial report:

FLIGHT FINANCIAL REPORT	
Extra charge(5). Number of PAX: 106	530.00
Cargo:4600 .Price per Cargo Unit:11	50,600.00
Number of PAX:106 .Price per PAX:80	8,480.00
Fuel(0.5). Fuel used: 2803.29	-1,401.65
Meal on board(8). Number of PAX: 106	-848.00
Airport Taxes	-200.00
<b>TOTAL</b>	<b>57,160.35</b>

A global view of the VA finances is also available the information is aggregated at financial parameter or type of cost/profit

VA GLOBAL FINANCIAL REPORT	
<b>COSTS</b>	
Airport Taxes	-600.00
Meal on board	-2,008.00
Fuel	-2,651.65
<b>INCOME</b>	
Extra charge	1,255.00
<b>INCOME REGULAR ROUTES</b>	
Cargo in regular routes	50,600.00
PAX in regular routes	8,480.00
<b>AIRCRAFT PURCHASE</b>	
A319 EC-LUH Luanca	-120,000,000.00
A319 EC-KAG Teide	-120,000,000.00
A319 EC-KKE Ibiza	-120,000,000.00
<b>FINANCIAL BALANCE</b>	<b>-359,944,924.65</b>

## xviii. Tour manager (added in VAM 2.5)

Tour module has been added in VAM 2.5. Each tour has 1 or more legs. The tours have a start and end date. Only during that period of time the pilots can report pireps for each tour to get the tour medal.

In the creation of the Tour VA administrators can set up the following attributes for each tour:

Tour	
Tour Name	IFR Spain
Tour description	Tour IFR Spain
Start Date	2015-01-01
End Date	2015-12-31
Tour Image url	http://files.ivao.es/eventos/tours/2015/IFR15.png
Tour Award Image url	https://www.ivao.aero/data/images/awards/W1.gif

### Actions

[Edit Tour](#) [New Leg](#) [New Tour](#) [Delete Tour](#)

Each Tour can have associated an image and an image for the tour medal. Use external links or upload your images to your hosting and write the internal URL. In the example I just put some examples from IVAO Spain IFR Tour.

Once you have added a tour it is time to create the legs. Press in New Leg button and fill the Tour leg form

### Add Tour Leg

<input type="text" value="IFR Spain"/>	Tour
<input type="text" value="1"/>	Leg Number
<input type="text" value="LEBL"/>	Departure
<input type="text" value="LEMD"/>	Arrival
<input type="text" value="280"/>	Leg Length
<input type="text" value="SENIA UZ596 NEXAS UN975 ADUXO"/>	Route
<input type="text" value="FL EVEN"/>	Comments
<input type="button" value="Submit"/>	

### Actions

[List Tour Legs](#)

You can see the list of Tour Legs

## Tour Legs

Tour	Leg Number	Departure	Arrival	Leg Length	Actions
IFR Spain	1	LEMD	LECO	350	  <a href="#">Delete</a>
IFR Spain	2	LECO	LEAL	500	  <a href="#">Delete</a>
IFR Spain	3	LEAL	LEZL	450	  <a href="#">Delete</a>
IFR Spain	4	LEZL	LEMD	250	  <a href="#">Delete</a>

Tours information is available for visitors from the main navbar

Virtual Airlines Manager

Home

About

Operations

Pilot Roster

Statistics

Language

System

Log out

Fleet

Routes

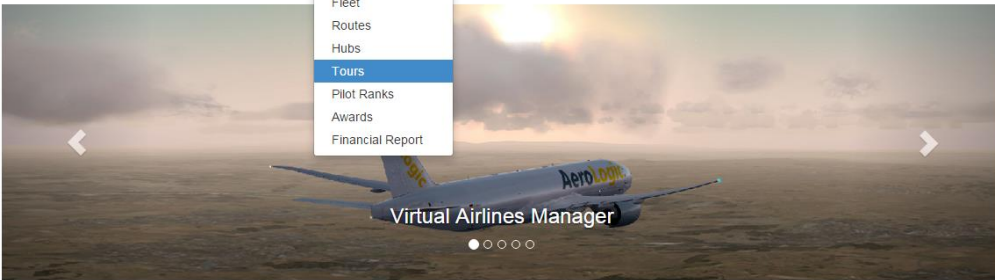
Hubs

Tours


Pilot Ranks

Awards

Financial Report





TOURS

Tour	Start date	End date	Num. Legs	Distance	Info
IFR Spain	2015-01-01	2015-12-31	4	1550	

Also detailed information about the tour is visible for pilots and visitors

TOUR DETAILS

Tour

IFR Spain

Start date

2015-01-01

End date

2015-12-31

Distance

1550

Num. Legs

4

TOUR LEGS



Departure	Arrival	Distance	Route	Comments
LEMD	LECO	350	LEMDLECO	COMMENT LEG 1
LECO	LEAL	500	ROUTE LECOLEAL	COMMENT LEG 2
LEAL	LEZL	450	ROUTE LEALLEZL	COMMENT LEG 3
LEZL	LEMD	250	ROUTE LEZLLEMD	COMMENT LEG 4



VA pilots can see the status of their leg reports. In this example the tour has 4 legs. The pilot has reported 3 flights, but so far only one has been accepted, the other is still pending to be validated.

ACTIVE TOURS						
Tour	Start date	End date	Num. Legs	Num. Legs Reported	Num. Legs Accepted	Info
IFR Spain	2015-01-01	2015-12-31	4	2	1	<a href="#">i</a>

TOUR DETAILS

Tour

IFR Spain

Start date

2015-01-01

End date



2015-12-31

Distance



1550

Num. Legs



4

TOUR LEGS			
Departure	Arrival	Legs Status	Report Leg
LEMD	LECO	✓	
LECO	LEAL	⏸	
LEAL	LEZL		
LEZL	LEMD		










Validators can see the tour legs reports pending to be accepted. Take in mind the pilots must report the real flight via VAM ACARS or any other option available in VAM. In this case we are only describing how a pilot reports a tour leg.

FLIGHTS VALIDATION								
Callsign	Departure	Arrival	Date	Duration	Distance	Type	Action	Log
VAM200	LEMD	LEBL	08-10-2015	1.00	300	Regular	 	<a href="#">i</a>

TOURS LEGS VALIDATION							
Callsign	Departure	Arrival	Date	Tour	Leg	Action	
VAM100	LEMD	LECO	2015-10-09	IFR Spain	1	 	

Once all the tour legs have been validated, VAM assign automatically the tour medal. This is visible from the pilot profile page.

PILOT TOURS							
							
FLIGHTS							
Date	Departure	Arrival	Duration	Distance	Type	Validation	Details
 2015-10-08 21:27:05	 LEBL	 LEMD	 0.85	 279	 Regular - VAM ACARS - VAM1010		

## xix. Awards manager (added in VAM 2.5)

In addition to the medals pilots can get from the tours completed, new medals can be created and assigned to the pilots. In this case the medal assignation is a manual task to be done by administrators.

With the new awards manager VA administrators can create/edit awards. Only two attributes are needed. The name and the image. In this case image is also a link. You can use external links or upload your images to your hosting and write the internal URL. In the example I just put an example from IVAO.

### Edit Award

<input type="text" value="+500 H"/>	Award Name
<input type="text" value="https://www.iviao.aero/data/images/awards/H1.gif"/>	Award Image
<input type="button" value="Submit"/>	

### Actions

<input type="button" value="List Awards"/>	<input type="button" value="List Pilot Awards"/>	<input type="button" value="Delete"/>
--	--	---------------------------------------

## xx. Awards assignation manager (added in VAM 2.5)

Once the awards are created administrators can assign medals/awards to pilots. This is as easy as select the award, the pilot and if desired add a comment.

### Add Award Pilot Assignment

<input type="text" value="+500 H"/>	Award
<input type="text" value="Javi"/>	Pilot
<input type="text" value="congrats for the first 500 h"/>	Comments
<input type="button" value="Submit"/>	












### Actions

[List Awards](#)[List Pilot Awards](#)

The comments can be reviewed by other administrators

Award Pilot	
Award Name	+500 H
Pilot	VAM200 Javi López
Date	2015-10-09 16:48:09
Comments	congrats for the first 500 h

The new assigned award will be visible automatically in the pilot profile page

<div><b>PROFILE</b></div>  <p>Name: Javi López Callsign: VAM200 Country: Spain  City: Madrid Hub: LEMD  Madrid Barajas International Airport Location: LEBL  Barcelona International Airport Rank:  First Officer Salary per hour: 250 Money: 124.50 eur Register date: 2015-10-07 14:46:34</p>	<div><b>PERSONAL STATICS</b></div> <table><tr><td>Total flights:</td><td>3</td></tr><tr><td>Total hours:</td><td>2.64</td></tr><tr><td>Distance:</td><td>872</td></tr><tr><td>Regular flights:</td><td>2</td></tr><tr><td>Charter flights:</td><td>1</td></tr><tr><td>% Regular flights:</td><td>66.67 %</td></tr><tr><td>Manual reports:</td><td>1</td></tr><tr><td>FS Keeper reports:</td><td>0</td></tr><tr><td>FS Acars reports:</td><td>0</td></tr><tr><td>VAM Acars reports:</td><td>2</td></tr></table>	Total flights:	3	Total hours:	2.64	Distance:	872	Regular flights:	2	Charter flights:	1	% Regular flights:	66.67 %	Manual reports:	1	FS Keeper reports:	0	FS Acars reports:	0	VAM Acars reports:	2	<div><b>PILOT CERTIFICATIONS</b></div> <table><tr><td> A319</td></tr></table>	 A319
Total flights:	3																						
Total hours:	2.64																						
Distance:	872																						
Regular flights:	2																						
Charter flights:	1																						
% Regular flights:	66.67 %																						
Manual reports:	1																						
FS Keeper reports:	0																						
FS Acars reports:	0																						
VAM Acars reports:	2																						
 A319																							
<div><b>PILOT AWARDS</b></div> <table><tr><td></td></tr></table>																							
																							

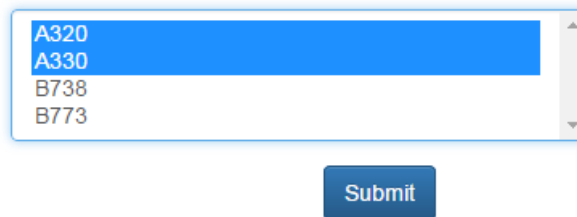
## 10. Regular flights (Scheduled flights)

VAM tries to encourage VA pilots to fly regular routes. Regular routes are managed by administrators. Each route is associated to one or more fleet type. For example:

- Route: Madrid-London is assigned to Fleet type B738, A320.

This means that any B738 or A320 can fly the route.

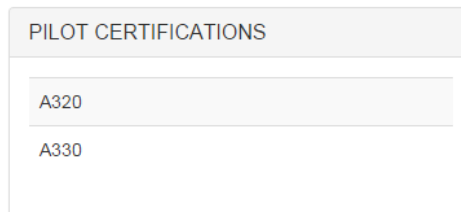
Each pilot is certificated to one or more fleet type. Administrators assign the certification for each pilot. Keep the CTRL button pressed to assign more than one fleet type to the pilot.



A320  
A330  
B738  
B773

Submit

The pilot certifications are visible in the pilot home page.



PILOT CERTIFICATIONS

A320  
A330

The assignation of fleet type to routes can be done via two options:


- Options 1: From Route manager, edit or create a route and keep the CTRL button pressed to assign more than one fleet type.

## Edit Route

<input type="text" value="VAM1108"/>	Flight
<input type="text" value="LEMD"/>	Departure
<input type="text" value="LEIB"/>	Arrival
<input type="text" value="LEPA"/>	Alternative
<input type="text" value="1830"/>	ETD
<input type="text" value="1930"/>	ETA
<input type="text"/>	Pax
<input type="text"/>	Price
<input type="text" value="ROUTE 1108"/>	FP Route
<input type="text" value="COMMENT 1108"/>	Comments
<input type="text"/>	Fuel
<input type="text" value="A320"/> <input type="text" value="A330"/> <input type="text" value="B738"/> <input type="text" value="B773"/>	Aircraft type assignment

- Option 2: From Route Fleet assignment, in this case the assignment is done one by one, a record is created for each croute-fleet type couple.

## Fleet Type & Routes



Route	Fleet type	Actions
VAM1100	A320	  <input type="button" value="Delete"/>
VAM1100	B738	  <input type="button" value="Delete"/>

Route	
Flight	VAM1100
Departure	LEMD
Arrival	LEBL
Alternative	LEZG
ETD	1000
ETA	1045
PAX	
Price	
Fuel	
Route	ROUTE 1100
Comments	COMMENT 1100

#### Actions

[Edit Route](#)
[List Routes](#)
[List Fleet Type](#)
[New Route](#)
[New Fleet Type](#)
[Delete Route](#)

#### Related Fleet Types

Plane Icao	Plane Description	Actions
A320	Airbus 320	  <a href="#">Delete</a>
B738	Boeing 738	  <a href="#">Delete</a>

A pilot can fly a regular route if meets the following conditions:

- Condition 1: The pilot must be in a location that is departure of a regular route.
- Condition 2: Regular routes from that location must be associated with a type of aircraft for which the pilot must be certificated.
- Condition 3: at least one aircraft must be free in that location.

#### Example:

- Route: Madrid-London (LEMD-EGLL) assigned to fleet type A320 and B738.
- Pilot VAM200 is certified only for MD82
- Pilot VAM200 location is Madrid (LEMD)
- At Madrid there are free aircraft with fleet type A320 , B738 and MD82

In this case the pilot cannot fly the regular route because does not meet the condition 2. He is not authorized to fly A320 or B738.

Now we add the certification for A320 to this pilot, then he will be able to book an A320 at Madrid to fly the route LEMD-EGLL. In this case the A320 is reserved. Other pilot cannot use this particular A320. The reservations are canceled automatically 24 hours after the reservation is done if the flight is not performed.

When the pilot reports the flight VAM system is able to detect if the flight is regular or charter. In the case of regular flight VAM system will do the following actions:

- Change the location of the pilot: the destination of the route (also changes if you report a charter flight).
- New location of the aircraft: aircraft's location is the destination of the route.
- The status of the aircraft is decreased based on the VA parameters (see next chapter)
- The number of flights and hours for the pilot and the aircraft is updated.
- The aircraft is unlocked.

## 11. Wear and maintenance of aircraft

VAM system simulates the wear of the aircraft. In any regular flight the aircraft status is decreased, this wear value is configurable by the administration on the VA parameters. Additional decrease is calculated based on the vertical speed during the touch down. Aircraft crash during the landing can be also detected based on a parameter.

It is important to remember that the aircraft status is only decreased when scheduled flights are reported, for charter flights the system is not able to recognize what aircraft has been used. (Note: Future versions of VAM will allow to use fleet aircraft for charter flights).

In red the parameters involved in the aircraft wear:

VA Parameters	
VA name	VAM Airlines
Airline ICAO	VAM
IWAO	YES
VATSIM	NO
Number allowed pilots	50
Cost jump type 1	100
Cost jump type 2	250
Cost jump type 3	500
Plane Status Hangar	65 %
Landing Crash	850 ft/min
Landing Penalty 1	3 %
Landing Penalty 2	6 %
Landing Penalty 3	10 %
Landing VS Penalty 1	200 ft/min
Landing VS Penalty 2	350 ft/min
Flight Wear	5 %
Number days for plane maintenance	2
Number days after crash	8

- Flight wear: is the fixed wear on each flight.
- Landing penalty 1: extra wear when the vertical speed during touch down is between 0ft/min and the value of the parameter **Landing VS Penalty 1**.
- Landing penalty 2: extra wear when the vertical speed during touch down is between the parameter **Landing VS Penalty 1** and the value of the parameter **Landing VS Penalty 2**.
- Landing penalty 3: extra wear when then vertical speed during touch down value is between the parameter **Landing VS Penalty 2** and the value of the parameter **Landing Crash**
- If the vertical speed during landing is greater than the value of the parameter **Crash Landing** the system detects an accident.

The aircraft is moved to the hangar for maintenance or repair in the following cases:

- If the accident is detected: vertical speed in the landing is greater than the value of the parameter **Crash Landing**. The aircraft is blocked for the number of days defined by the parameter **Number days after crash**.
- If after applying the wear the status of the aircraft is below the value of parameter **hangar Plane status**. The aircraft is blocked for the number of days defined by the **Number parameter days for plane maintenance**.



## 12. Jumps validator

Pilots can move from the current location performing jumps. Jumps have cost for the pilot, this cost depends on the distance of the jump. To simplify the process, VAM system is designed to handle three types of jumps:

- National jump: when the departure and destination are the same country. The cost for the pilot is defined by the **Type 1 Jump Cost** parameter.
- Continental jump: when the departure and destination are the same continent. The cost for the pilot is defined by the **Type 2 Jump Cost** parameter.
- Intercontinental jump: when the departure and destination are in different continent. The cost for the pilot is defined by the **Type 3 Jump Cost** parameter.

JUMPS VALIDATION						
Callsign	Departure	Arrival	Date	Jump type 1	Jump type 2	Jump type 3
VAM222	LEZG	LEMD	2015-02-13 18:46:32			

## 13. Flights validator

Flight validators can validate or reject the flights reported. On the same page all flights regardless of the report method are displayed.

FLIGHTS VALIDATION								
Callsign	Departure	Arrival	Date	Duration	Distance	Type	Action	Log
VAM222	EIDW	ENGM	2015-02-07 22:24:11	1.70	731	Charter	 	
VAM222	LEMD	LEIB	2015-02-07 16:17:03	0.70	252	Charter	 	
VAM222	LEMD	LESA	2015-02-07 13:43:16	0.40	93	Charter	 	
VAM222	LEMD	LEBL	2015-02-07 13:38:55	0.80	261	Charter	 	
VAM222	LEMD	EKCH	2015-02-07 13:38:28	2.30	1,148	Charter	 	
VAM222	LEMD	EBBR	2015-02-07 13:37:45	1.70	710	Charter	 	
VAM222	WARR	WSSS	2015-02-07 13:33:23	1.80	799	Charter	 	
VAM222	LEAS	LEVX	2015-02-07 13:10:38	0.50	139	Charter	 	
VAM222	LEAS	LEIB	2015-02-07 13:09:45	1.40	491	Charter	 	
VAM222	LEMD	OMDB	2015-02-07 12:07:39	6.80	3,314	Charter	 	
VAM222	GCLP	LEMD	2015-02-07 12:04:34	2.00	953	Charter	 	

The money to be paid to the pilot is based on the following rules

- Every hour of flight is paid based on the rank of the pilot: the pilot's rank is assigned in the administration of pilots.
- The salary per hour is different for each rank, this is configured in the rank manager.

### Ranks

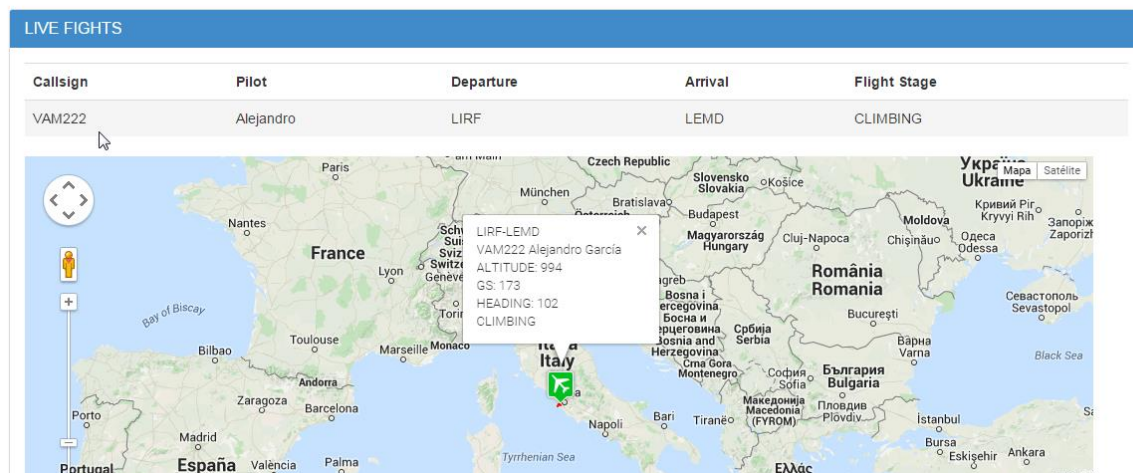
Rank	Salary Hour	Actions
New Hire	100	  
First Officer	250	  
Captain	1000	  
Senior Captain	2000	  

- For the charter flights there is a reduction on the money earned, this reduction is defined by the parameter **Charter Reduction**.

## 14. VAM ACARS (new in VAM 2.2)

VAM ACARS is a new ACARS developed 100% by me. It is free software and totally integrated with VAM. VAM ACARS can be used with FS2004, FSX, P3D and XPLANE. VAM ACARS monitors every 100 milliseconds the main flight parameters, detect and store the main flight events.

Flights using VAM ACARS are displayed in the VAM home page as “LIVE FLIGHTS” the table and map associated is refreshed every 2 minutes.



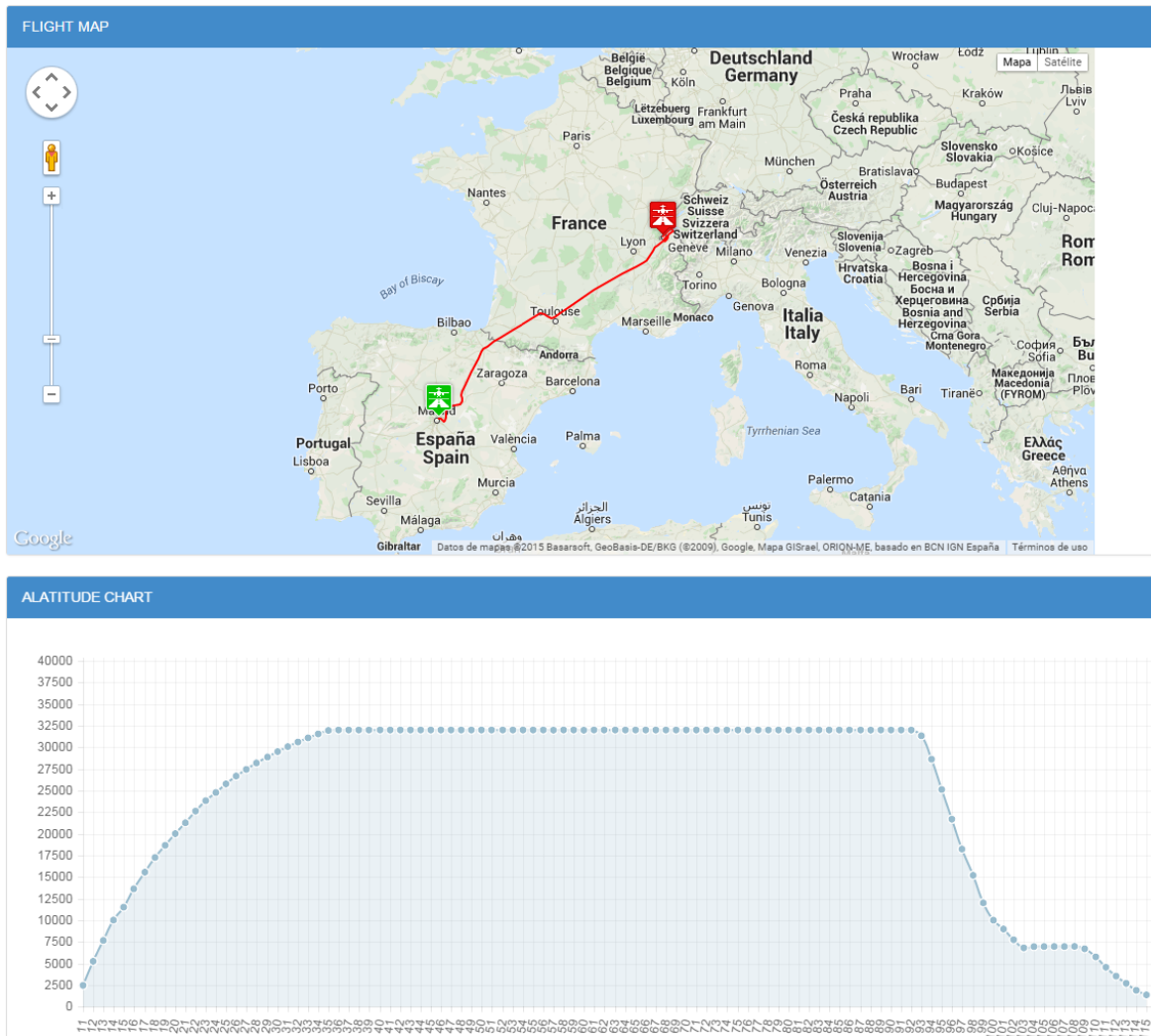
Once the flight is reported using VAM ACARS all the details, events and ACARS information is available in the VAM system.

FLIGHT DETAILS					
Pilot:	VAM222 Alejandro García	Aircraft:	PMDG 777-31HER EMIRATES (1000TH 777)	Distance:	3366NM
Departure	LEMD	Arrival	OMDB	Duration	7.03
Validation	Pending Validation	Type	Charter	Registry	A6-EGO
ZFW	205882	Block Fuel	132,219	Flight Fuel	51,090
Passengers	278	Cargo	15000	Alternate	OMSJ
Departure Time	1145	Cruise Speed	465	Flight Level	FL370
Flight Type	IFR	Aircraft Type	B773	Weight Unit	Kg
Date	2015-06-13 20:46:17	Pilot Comments	TEST LONG HAUL	Network	OFFLINE
Crashed	No	Validator Comments		Flight Rating	63

ROUTE	
ROUTE	NANDO UM871 PTC UN851 MHN UM603 ARSIK/N0473F350 UP167 ARLOS UN4 SALUN L604 BRN UP751 KATAB R778 FYM UM872 WEJ/N0470F370 L604 ALMAL UM872 LOTIT UP569 VUXOR Y505 DESDI
REMARKS	FUEL TANK CAP 147850 KG / MAX EXTRA FUEL 17338 KG LIM BY LDW TRIP CORR FOR 3000 KG TOW INCR: +524 KG / 3000 KG TOW DECR: -509 KG 2000 FT LOWER: +1303 KG / EET 06:57 CLB: 250/310/84 DES: 84/310/250

FLIGHT FAILURES					
Crashed	OK	Beacon off & Engine Running	OK	IAS Above 250 Kts below 10000 FT	OK
Lights off below 10000 FT	OK	Lights off above 10000 FT	OK	Stall	OK
Overspeed	OK	Flight paused	OK	Refueling	Fail
Slew detected	OK	Taxi & Taxi lights off	Fail	Take off & lights off	OK
Landing & lights off	OK	Landed in not planned airport	OK	Taxi Speed	Fail

LANDING ANALYSIS			
Landing VS:	-229.92 ft/min	Landing IAS:	134.64 kt
Landing Force G	2.2 G	Landing Bank	-0.1
Landing Pitch	4.7	Landing Flaps	6
Navigation Lights	ON	Landing Lights	ON
Beacon Lights	ON	Strobe Lights	OFF



The pilots do not have to create any template file to use VAM ACARS, the only information needed is the VAM ACARS that must be the same as the Virtual Airline url + "/vam"

For example:

- <http://yourvdomain.com/vam>
- <http://unitedva.com/vam>

Users can download the VAM ACARS from the link download within pilot options, also it is available from [www.virtualairlinesmanager.net](http://www.virtualairlinesmanager.net) and/or [www.simacars.net](http://www.simacars.net)  
For detailed information visit [www.simacars.net](http://www.simacars.net), it is the new web I created dedicated to the ACARS.

## 15. VAM ACARS Parameters & Flight Rating (new in VAM 2.3)

Since VAM 2.3 and SIM ACARS 1.2.0 administrators can set up rules to perform an automatic flight rating. Depending on the flight failures some percentages are discounted. The final result will be based on the discount applied per each type of failure. The discount per failure type is set up from the Administration panel (ACARS Parameters).

Virtual Airlines Manager   Exit administration

Edit VAM ACARS Parameters

<input type="text" value="100"/>	Crash
<input type="text" value="5"/>	Beacon Off
<input type="text" value="15"/>	Ias Below 10000 Ft
<input type="text" value="10"/>	Lights Below 10000 Ft
<input type="text" value="10"/>	Lights Above 10000 Ft
<input type="text" value="25"/>	Stall
<input type="text" value="15"/>	Overspeed
<input type="text" value="5"/>	Pause
<input type="text" value="25"/>	Refuel
<input type="text" value="100"/>	Slew
<input type="text" value="5"/>	Taxi Lights
<input type="text" value="7"/>	Taxi Speed
<input type="text" value="10"/>	Takeoff Lights
<input type="text" value="10"/>	Land Lights
<input type="text" value="5"/>	Incorrect Arrival
<input type="text" value="0"/>	Landing Vs 0 100
<input type="text" value="1"/>	Landing Vs 100 200
<input type="text" value="5"/>	Landing Vs 200 300
<input type="text" value="10"/>	Landing Vs 300 400
<input type="text" value="15"/>	Landing Vs 400 500
<input type="text" value="18"/>	Landing Vs 500 600
<input type="text" value="25"/>	Landing Vs Greater 600

Submit

The list of parameters is:

- Crash detected
- Beacon light off while engines are running
- IAS >250 below 10.000 FT (actually the failure is detected at 260 KIAS)
- Lights below 10.000 FT: landing light off
- Lights above 10.000 FT: landing light on
- Stall
- Over speed
- Pause
- Refuel (detected if increments or decrements is bigger than 500 units)
- Slew done in the simulator
- Taxi lights off while taxi
- Take off lights: landing lights off while taking off
- Land lights: landing lights off while landing
- Incorrect arrival: pilot landed in a different airport from the planned one.
- Landing VS 0 100: penalty for landing at vertical speed between 0 – 100 ft/min
- Landing VS 100 200: penalty for landing at vertical speed between 101 – 200 ft/min
- Landing VS 200 300: penalty for landing at vertical speed between 201 – 300 ft/min
- Landing VS 300 400: penalty for landing at vertical speed between 301 – 400 ft/min
- Landing VS 400 500: penalty for landing at vertical speed between 401 – 500 ft/min
- Landing VS 500 600: penalty for landing at vertical speed between 501 – 600 ft/min
- Landing VS greater 600 : penalty for landing at vertical speed > 601 ft/min

## 16. FS Keeper configuration

FS keeper is one of the most powerful ACARS for FS and P3D. To get information about this ACARS please visit the FS Keeper website: <http://www.flightkeeper.net/>

VAM is creating a report template for each user in the download page. You have to modify the file `create_template_fskeeper.php` in order to point to your domain. Remember that the file that is receiving the information from FS Keeper is `YOUR_DOMAIN/FSFK/PIREPSERVICE.php`

## 17. FS ACARS configuration

**IMPORTANT** Since VAM 2.2 a new ACARS has been integrated, VAM ACARS is better than FS ACARS, also due to FS ACARS is an abandoned project it is recommended to do not use it and use VAM ACARS.

FS ACARS is a free ACARS tool. It is free but a little bit old. To get the installers and more information visit <http://www.satavirtual.org/fsacars/>

VAM is creating a report template for each user. You have to modify the file `create_template_fsacars.php` in order to point to your domain. Remember that the file that is receiving the information from FS ACARS is `YOUR_DOMAIN /fsacars/receive_pirep.php`

## 18. Twitter Time Line configuration in home page

You should modify the file `main_index.php` the lines 468 and 478 in order to get your own twitter Time Line.

```
462         <div class="col-md-4">
463             <div class="panel panel-default">
464                 <div class="panel-heading">
465                     <h3 class="panel-title"><?php echo TWEETS; ?></h3>
466                 </div>
467                 <div class="panel-body">
468                     <a class="twitter-timeline" href="https://twitter.com/pilotovirtual"
469                       data-widget-id="525729765416660992">Tweets por el @pilotovirtual.</a>
470                     <script>!function (d, s, id) {
471                         var js, fjs = d.getElementsByTagName(s)[0], p = /^http:/.test(d.location) ? 'http' : 'https';
472                         if (!d.getElementById(id)) {
473                             js = d.createElement(s);
474                             js.id = id;
475                             js.src = p + "://platform.twitter.com/widgets.js";
476                             fjs.parentNode.insertBefore(js, fjs);
477                         }
478                     }(document, "script", "twitter-wjs");</script>
479                 </div>
480             </div>
481         </div>
482     </div>
```



## 19. Changelog (from VAM 2.2)

- VAM 2.2
  - Enhancements
    - Full integration of new ACARS (VAM ACARS)
  - Bug Fix
    - Minor bug fixing
- VAM 2.3
  - Enhancements
    - Full automatic flight rating based on flight failures. Exclusive for VAM ACARS flights. Rating is based on new parametrization: VAM ACARS parameters
    - New parameters for VA:
      - Administrator can decide if rejected flights count. Parameter: No Count Rejected
      - Administrator can decide if pilot information is public. Parameter: Pilot Public
    - Flight validators can add comments on each type of flight.
    - Captcha added on pilot register form.
    - Automatic clean of auto generated templates.
    - Securitization of links to prevent no registers users' action.
    - Enhancements on VAM ACARS interface.
    - Administrators can transfer hours from previous VA system.
  - Bug Fix
    - Pilot profile page drop downs corrected.
    - Hours counters corrected in failing cases.
    - Minor bug fixing in layouts
- VAM 2.4
  - Enhancements
    - Information about airports available: runway information, frequencies, METAR and TAF.

## METAR AND TAF INFORMATION

### METAR FOR LEBB

(1433 UTC 05 July 2015)

Data provider <http://aviationweather.gov/adds/metars/>

**METAR text:** LEBB 051400Z 33009KT 9999 SCT009 BKN018 20/19 Q1022 NOSIG

**Conditions at:** LEBB (BILBAO/SONDICA , ES) observed 1400 UTC 05 July 2015

**Temperature:** 20.0°C (68°F)

**Dewpoint:** 19.0°C (66°F) [RH = 94%]

**Pressure (altimeter):** 30.18 inches Hg (1022.0 mb)

**Winds:** from the NNW (330 degrees) at 10 MPH (9 knots; 4.7 m/s)

**Visibility:** 6 or more miles (10+ km)

**Ceiling:** 1800 feet AGL

**Clouds:** scattered clouds at 900 feet AGL

broken clouds at 1800 feet AGL

**Weather:** no significant weather observed at this time

**Forecast for:** LEBB (BILBAO/SONDICA , ES)

**Text:** TAF LEBB 051100Z 0512/0612 35009KT 9999 SCT014 BKN028 TX24/0516Z TN19/0606Z

**Forecast period:** 1200 UTC 05 July 2015 to 1200 UTC 06 July 2015

**Forecast type:** FROM: standard forecast or significant change

**Winds:** from the N (350 degrees) at 10 MPH (9 knots; 4.7 m/s)

**Visibility:** 6 or more miles (10+ km)

**Ceiling:** 2800 feet AGL

**Clouds:** scattered clouds at 1400 feet AGL

broken clouds at 2800 feet AGL

**Weather:** no significant weather forecast for this period

### AIRPORT MAP



### RUNWAY INFORMATION

Runway	10	Runway length	6562 ft	Runway width	148 ft
Runway elevation	116 ft	Runway displaced threshold	0 ft	Runway heading	97
Runway	28	Runway length	6562 ft	Runway width	148 ft
Runway elevation	129 ft	Runway displaced threshold	0 ft	Runway heading	277
Runway	12	Runway length	8530 ft	Runway width	148 ft
Runway elevation	119 ft	Runway displaced threshold	0 ft	Runway heading	117
Runway	30	Runway length	8530 ft	Runway width	148 ft
Runway elevation	128 ft	Runway displaced threshold	1509 ft	Runway heading	297

### AIRPORT FREQUENCIES

Type	APP	Name	APP	Frequency	120.7 MHz
Type	ATIS	Name	ATIS	Frequency	118.825 MHz
Type	GND	Name	GND	Frequency	121.7 MHz

### AIRPORT NEAR NAVIGATION AIDS

Type	VOR-DME	Name	Bilbao	Frequency	115900 KHZ
------	---------	------	--------	-----------	------------

- Added route and METAR information during the reserve of a regular flight

AVAILABLE AIRCRAFTS						
Flight	Departure	Arrival	Aircraft type	Aircraft registry	Aircraft status	Aircraft Book
VAM2010	LEMD	LEBB	Boeing 737-800	ECKLO	95	

ROUTE INFORMATION	
Alternative	LEXJ
Time Dep.	1100
Time Arr.	1205
Duration	0.9
Route	SIE B190 CEGAM
Price	100
Comments	TEST1

METAR AND TAF INFORMATION	
METAR FOR LEMD	
(1457 UTC 05 July 2015)	
Data provider <a href="http://aviationweather.gov/adds/metars/">http://aviationweather.gov/adds/metars/</a>	
METAR text: LEMD 051430Z VRB08G21KT CAVOK 37/06 Q1018 NOSIG	
Conditions at: LEMD (MADRID/BARAJAS , ES) observed 1430 UTC 05 July 2015	
Temperature: 37.0°C (99°F)	
Dewpoint: 6.0°C (43°F) [RH = 15%]	
Pressure (altimeter): 30.06 inches Hg (1018.0 mb)	
Winds: variable direction winds at 9 MPH (8 knots; 4.2 m/s)	
gusting to 24 MPH (21 knots; 10.9 m/s)	
Visibility: 6 or more miles (10+ km)	
Ceiling: ceiling and visibility are OK	
Clouds: unknown	
Weather: no significant weather observed at this time	

- Pilots will receive an email when the flights are accepted, rejected or deleted by the administrators
- Pilots will be able to set a flag in order to do not receive the automatics emails for flights validation. This is changes from "My profile"

MY PROFILE	
Name:	Manolo
Last Name:	Aston
IVAO ID:	11
VATSIM ID:	0
Language:	English
Country:	Australia
City:	11
Hub:	LEMD
Email:	admin@pilotovirtual.net
Do you want to receive emails?	Yes

- Staff email address will receive an email when the flights are reported.
- Dynamic search of routes:

Route Searcher

Departure:


Arrival:

Routes VAM Airlines				
Flight	Departure	Arrival	Duration	Plane Type
VAM2106	GCCR	LEMD	0	B738
VAM2105	GCXO	LEMD	0	B773
KRDM	KRDM	CYVR	0	A320 A330 B738 B773 B58
VAM2111	LEAL	LEVC	0	B58
VAM2103	LEBB	LEMD	0	A320
VAM2100	LEBL	LEMD	0	A320 B738 CRJ200
VAM2108	LEIB	LEMD	0	B773
VAM1106	LEMD	GCCR	0	A320
VAM1105	LEMD	GCXO	0	A320

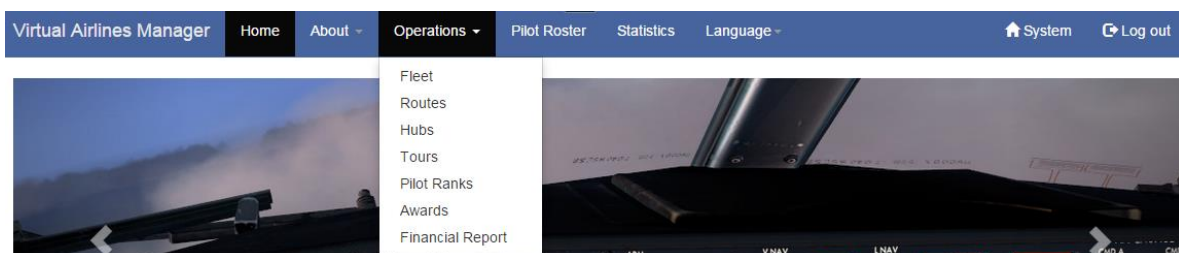
- New security enhancements in administration panel.
  - Administrators are able to deleted reported flights.
  - New languages: French, Czech
  - Cosmetic enhancements.
  - Responsive charts in statistics pages.
  - Added a field in the routes for the route duration.
- Bug Fix:
    - Hide popup in charts, this will helps to see the charts properly.
    - Deprecated php function in FS ACARS report migrated to a php 5.5 function.
    - Fixed the issue with the message “warning: Notice: A session had already been started - ignoring session\_start()”
    - Fixed the issue with pilot privacy page for non-registered users. See new parameter in VAM 2.3

- VAM 2.5
  - Enhancements
    - New module awards manager: administrators can create and assign awards/medals to pilots
    - New module financial manager: administrators can create dynamic financial parameters that will affect the financial balance of the VA.
    - New module tour manager: administrators can create tours and tours legs. Pilots will get automatically a tour award once all the legs are validated.
    - Home page: new data related to live flights: aircraft type, pending NM and % completed

LIVE FIGHTS							
Callsign	Pilot	Departure	Arrival	Flight Stage	Plane type	% Done	Pending NM
VAM100	Administrador VAM	LEMD	LEIB	CLIMBING	B738	5%	238











- Home page: New navbar items.








- Hubs: now not only the pilots are linked to a hub, since VAM 2.5 the fleet and routes are linked to a hub. This will allow to big VA to manage hubs in better way.






# Madrid Barajas International Airport

HUB PILOTS							HUB FLEET				
Callsign	Name	Location	Hours	Rank	Country	Status	Registry	Type	Location	Hours	Status
VAM100	Administrador VAM	LEMD	0	New Hire			EC-LUX	Airbus 319 CFM	LEMD	0	100
VAM110	Pilot 1 Surname 1	LEMD	0	Captain			EC-KHV	Airbus 319 CFM	LEMD	0	100
VAM120	Pilot 2 Surname 2	LEMD	0	New Hire			EC-JKE	Airbus 319 CFM	LEMD	0	100
VAM130	Pilot 3 Surname 3	LEMD	100	New Hire			EC-HER	Airbus 319 CFM	LEMD	0	100
							EC-FFE	Airbus 319 CFM	LEMD	0	100
							EC-KSW	Airbus 320 NEO	LEMD	0	100
							EC-KAG	Airbus 320 NEO	LEMD	0	100
							EC-KOP	Airbus 320 NEO	LEMD	0	100
							EC-KLQ	Airbus 320 NEO	LEMD	0	100
							EC-JUK	Airbus 320 NEO	LEMD	0	100

- Ranks are associated to an image. VAM assigns automatically the rank for each pilot based on flights time validated.

Pilot Roster VAM Airlines									
Callsign	Name	Hub	Location	Hours	Rank	Country	Status	IVAO ID	VATSIM ID
VAM100	Administrador VAM	LEMD	LEAL	0.95	 New Hire			999999	999999
VAM200	Javi López	LEMD	LEBL	2.64	 First Officer			111111	222222

- Cosmetic enhancements in pilot profile page. Pilots can upload a picture for their profiles.

PROFILE	PERSONAL STATISTICS	PILOT CERTIFICATIONS
 <p>Name: Javi López</p> <p>Callsign: VAM200</p> <p>Country: Spain </p> <p>City: Madrid</p> <p>Hub: LEMD  Madrid Barajas International Airport</p> <p>Location: LEBL  Barcelona International Airport</p> <p>Rank:  First Officer</p> <p>Salary per hour: 250</p> <p>Money: 124.50 eur</p> <p>Register date: 2015-10-07 14:46:34</p>	<p>Total flights: 3</p> <p>Total hours: 2.64</p> <p>Distance: 872</p> <p>Regular flights: 2</p> <p>Charter flights: 1</p> <p>% Regular flights: 66.67 %</p> <p>Manual reports: 1</p> <p>FS Keeper reports: 0</p> <p>FS Acars reports: 0</p> <p>VAM Acars reports: 2</p>	<p>✈ A319</p>

- New security on the administration panel. Now can be created several types of administrators with restricted access to administration modules.
- Pilots can check tour reports validation.


ACTIVE TOURS						
Tour	Start date	End date	Num. Legs	Num. Legs Reported	Num. Legs Accepted	Info
Tour IFR Spain 2015	2015-01-01	2015-12-31	6	1	1	<a href="#">i</a>

TOUR LEGS			
Departure	Arrival	Legs Status	Report Leg
LEMD	LEIB	✓	
LEIB	LECO		<a href="#">i</a>
LECO	LEZL		<a href="#">i</a>
LEZL	LEBL		<a href="#">i</a>
LEBL	LEMG		<a href="#">i</a>
LEMG	LEMD		<a href="#">i</a>

- New information and cosmetic enhancements for aircrafts.

FLEET								
Tail Number	Type	Location	Hub	Status	Hours	Name	Booked	Info
EC-KAG	A319	LEBL	LEMD	95	1	Teide	Free	<a href="#">i</a>
EC-LUH	A319	LEMD	LEMD	90	1.64	Luarca	Free	<a href="#">i</a>
EC-KKE	A319	LEPA	LEMD	100	0	Ibiza	Free	<a href="#">i</a>

AIRCRAFT DETAILS




Name

Luarca


Location

LEMD

 Madrid Barajas International Airport

Hub

LEMD

 Madrid Barajas International Airport

Type

Airbus A319

Hours

1.64

Booked

Free

Status

90

Number of PAX

125

Maximum range

3500

Cargo capacity

8500

Aircraft length

120m

Maximum zero-fuel weight (MZFW)

61500

Maximum landing weight (MLW)

51000

Maximum ramp weight (MRW)

66000

FLIGHTS FOR AIRCRAFT WITH TAIL NUMBER EC-LUH							
Date	Pilot	Callsign	Flight	Departure	Arrival	Distance	Fuel
07-10-2015	Javi López	VAM200	CHARTER	LEMD	LEBL	293.4	2628.09
08-10-2015	Javi López	VAM200	VAM1010	LEBL	LEMD	278.5	2803.29

- Aircrafts can be used also in charter flights. Same rules from regular flights about aircraft wear will apply. This is managed by the new parameter Allow Select Aircraft For Charter. If it is activated when a pilot is connecting from SIM ACARS to the web the list of available aircrafts in his/her position will appear in SIM ACARS.

Unselect Aircraft

A320 ECKAG

A320 ECKAZ

A320 ECKKJ

A320 ECKLP

A320 ECKMT

A320 ECKSW

A320 ECLEP

A320 ECLKI

A320 ECLRO

A320 ECLSW

A320 ECLVG



- New stats: hours per year and month, flights per year and month, flights per type of aircraft and hours per Tail registry

#### HOURS PER YEAR AND MONTH

Callsign	Pilot	Year	Month	Hours
VAM842	Sergey Ivanov	0	0	0.00
VAM200	Alejandro Garcia	2015	2	10.90
VAM210	Hartwig Fuhrmann	2015	2	1.90
VAM200	Alejandro Garcia	2015	5	7.82
VAM210	Hartwig Fuhrmann	2015	5	4.94
VAM100	Administrador VAM	2015	5	2.12
VAM100	Administrador VAM	2015	6	0.11
VAM200	Alejandro Garcia	2015	7	8.41
VAM200	Alejandro Garcia	2015	8	9.28
VAM842	Sergey Ivanov	2015	9	93.57
VAM200	Alejandro Garcia	2015	9	6.25
VAM928	yaya78 Kedjouti	2015	10	130.00
VAM842	Sergey Ivanov	2015	10	67.94


#### FLIGHTS PER YEAR AND MONTH

Callsign	Pilot	Year	Month	Flights total
VAM842	Sergey Ivanov	0	0	3
VAM200	Alejandro Garcia	2015	2	6
VAM210	Hartwig Fuhrmann	2015	2	1
VAM200	Alejandro Garcia	2015	5	5
VAM210	Hartwig Fuhrmann	2015	5	2
VAM100	Administrador VAM	2015	5	1
VAM100	Administrador VAM	2015	6	1
VAM200	Alejandro Garcia	2015	7	4
VAM200	Alejandro Garcia	2015	8	5
VAM842	Sergey Ivanov	2015	9	7
VAM200	Alejandro Garcia	2015	9	6
VAM842	Sergey Ivanov	2015	10	4
VAM928	yaya78 Kedjouti	2015	10	1

TOP 5 FLIGHTS PER AIRCRAFT TYPE	
Aircraft type	Flights
A319	5
CRJ2	4
B738	4
CRJ200	3
A320	3

TOP 5 FLIGHTS PER AIRCRAFT	
Tail Number	Hours
EC-LUH	3.27
EC-KAG	1.00

- New information during the confirmation of a regular flight reserve. The number of PAX and cargo is dynamically assigned based on the fleet type information. This quantities affects in the financial calculations.

AVAILABLE AIRCRAFTS						
Flight	Departure	Arrival	Aircraft type	Tail Number	Aircraft status	Aircraft Book
VAM1010	LEBL	LEMD	Airbus A319	EC-KAG	95 	

ROUTE INFORMATION	
Duration	0.95
Alternative	LEZG
Time Dep.	1530
Time Arr.	1630
Route	RUTA LEBL-LEMD
Flight Level	FL290
Price	80
Comments	

- SIM ACARS reports: new failures detected: incorrect altimeter setting during takeoff and landing.
- SIM ACARS reports: new landing analysis parameters: win direction & intensity, landing heading.

LANDING ANALYSIS			
Landing wind	338°/2 kt	Landing heading	322
Landing VS:	-173.01 ft/min	Landing IAS:	144.94 kt
Landing Force G	1 G	Landing Bank	-0.5
Landing Pitch	-1.1	Landing Flaps	8
Navigation Lights	ON	Landing Lights	ON
Beacon Lights	ON	Strobe Lights	OFF

- Other minor cosmetic in several web pages.
- New language : German.

- Bug Fix:
  - Solved an issue that mix aircraft registry and aircraft type when importing a regular flight to SIM ACARS.
  - VA Parameters information corrected for aircraft maintenance duration
  - Live maps: Solved an issue on some hostings (hostinguer)
  - Pilot surname added in the stats