

CROATIA AIRLINES VIRTUAL

PILOTS' OPERATION MANUAL

NOT FOR REAL LIFE USE
ONLY TO USE WITH FLIGHT SIMULATOR

Supported by real airline

 CROATIA AIRLINES

rev November 2017

This manual is intended for flight simulation use only and for use with Croatia Airlines Virtual airline systems. If you are not a Croatia Airlines Virtual pilot, you can join Croatia Airlines Virtual for free, please visit www.croatia-virtual.com.hr for more details.

If you need information about Croatia Airlines airliner, you will find them at www.croatiaairlines.com.

CONTENTS:

1. Croatia Airlines Virtual Information

- 1.1. Croatia Airlines Virtual Information
- 1.2. Croatia Airlines Virtual Rules and Regulations
- 1.3. Croatia Airlines Virtual Copyright Information

2. Croatia Airlines Virtual

- 2.1. Signing up for Croatia Airlines Virtual
- 2.2. Activity policy
- 2.3. Leave Policy
- 2.4. Croatia Airlines Virtual on web
- 2.5. Forum board
- 2.6. Contact

3. Flight Operations

- 3.1. Fly briefing
- 3.2. Flight Plans and ACARS systems
- 3.3. Croatia Airlines Virtual Regulations For Flight
- 3.4. Online flying on network (IVAO or VATSIM)
- 3.5. Schedules flights
- 3.6. Charter flights
- 3.7. Events
- 3.8. Missions
- 3.9. Company IFR Tours
- 3.10. Submitting the Flight Report

4. Standard Operating Procedures

- 4.1. Flight number and callsign
- 4.2. Flight plans and routing
- 4.3. Simulation Regulations

5. Fleet

- 5.1. Aircraft Information
- 5.2. Additional aircraft for use with ACARS system

6. Restrictions

- 6.1. Other Virtual Airlines
- 6.2. Flight Frequency
- 6.3. Warnings and exclusion from Virtual Airline

1. Croatia Airlines Virtual Information

1.1. Croatia Airlines Virtual Information

First of all, in behalf of Croatia Airlines Virtual, welcome.

We are a free non-profit, non commercial, volunteer organization for use with Microsoft's Flight Simulator and the ever popular growing X-Plane community. In CAV (Croatia Airlines Virtual), we believe in the notions of participation and community, because by sharing our experiences and basic knowledge of aviation, we can all become better pilots and enjoy this hobby that much more. We want to create an online community where pilots of all ages and abilities can come and have a great time. We want to provide a fun and social meeting with pleasant atmosphere for all our pilots. We will not bother you with excessive rules and white papers, strictly flight assignments and restrictions. Our policy is: "If you can fly, join us in the sky". Although we try to offer you to become a much more than a virtual pilot. Our senior pilot will provide you with training, high quality procedures and aircraft operation manuals.

Croatia Airlines Virtual as virtual company was established at the beginning of October 2010. In the begging it was originally set and placed on a web server together with another Croatian virtual company "Dubrovnik Airlines" with the name Croatia Virtual. The first idea was to associate all airlines which are coming from Croatian territory in a one single virtual company. After a few days the website has received its name Croatia Virtual and was the union of the three airlines from the Croatian region (Croatia Airlines, Dubrovnik Airlines and Trade Air).

The founders and architects of the site and company's were Ivo Crnjac and Zozef Franetovic. Soon Tino Elezovic joined the project. Ivo was reasonable for the official site, Zozef was responsible for creating events and Tino was dealing with procedures and documents.

The company slowly become recognizable at a friend's of virtual flying, so from day to day we received a new pilot.

Major shift in the company comes on 30.06.2012. At that day, we get a written permission from real airliner "Croatia Airlines" that we can use their name and logo for our virtual airline. In that moment we become an official Croatia Airlines Virtual. Web site and all other document were changed according to agreement between "Croatia Airlines" and us.

After two years of hard work and proving that we were serious virtual company, we applied on IVAO community and become an official Croatia Airlines Virtual company on IVAO network.

Today we gather around forty active pilots, which can fly the routes used by Croatia Airlines in reality and the possibility of choosing Charter flights. Organizing the regular events we meet from week to week, documenting the pictures and debate about it on forum pages. Croatia Airlines Virtual today boasts of dedicated and competent staff who at all times is ready to help new pilots as well as any problems that emerged related to virtual flying. The main motto of the company is a comfortable socializing and fun, and to get out of each flight with something new in our knowledge of flying.

1.2. Croatia Airlines Virtual Rules and Regulations

If you would like to join our virtual airline, you have to read and agree the following rules and regulations:

1. All members must be at least 16 years old to join Croatia Airlines Virtual.
2. You will need Microsoft Flight Simulator X, Microsoft Flight Simulator 2004, Microsoft Flight Simulator 2002 or X-Plane to fly our aircraft.
3. Also you will need working version of *CAVacars* installed. You can download it on our web site.
4. All members must use their real identity when applying to Croatia Airlines Virtual, no nicknames or call-signs permitted. It is mandatory that all pilots provide a valid e-mail provider, e-mail like @yahoo,

@gmail, @hotmail and similar are not permitted. Please note that registration process is a two-step way that involves an e-mail send to your address. You may only register one account with Croatia Airlines Virtual.

5. After registration you will be directed by e-mail to go on forum page "New Pilots" and write something about yourself. You will be given a temporary pilot ID and a password. You will need the password when you log in. After you wrote something about yourself, which is proof to us that you are real person who want to fly for us, you will get a permanent pilot ID and access to ACARS system, full web and full forum page.

6. The following details of yours will appear on the site: Pilot ID: Rank: Total Flights: Total Hours:. The other details (like e-mail address, real name or similar) will not appear on the site. The information you provide will not given to any private organizations or private persons under any circumstances.

7. When submitting PIREP manually, pilots must ensure they are fully accurate and true. Failure to submit true and accurate PIREP will result in that flight report being discarded.

8. We expect you to be polite and professional. You must have the ability to show professionalism within the organization and when conducting online operations on the IVAO, VATSIM or another network. Please treat other pilots and staff with respect. Insulting our members in any will not be tolerated and pilots will face severe sanctions if found doing so. Pilots are prohibited from using the Croatia Airlines Virtual Forum or other services to harass, abuse, intimidate or stalk others or to otherwise violate the legal rights of others.

9. We support flying on all network and offline. If pilots are a member of the IVAO network, please supply a valid IVAO ID. Pilots flying on IVAO network must use the call-sign they are given upon booking their flight.

10. Croatia Airlines Virtual cannot be held responsible for any damage done by the website or by files downloaded from the website. Croatia Airlines Virtual as an organization is not responsible for personal appearances, opinions and actions of individuals that they presented to the public. These statements doesn't reflect the official statements and opinions of CAV as organization.

1.3. Croatia Airlines Virtual Copyright Information

Our airline is virtual and exists only in the computer and internet world. Due to fact that we are supported by real airliner "CROATIA AIRLINES", the logo and the paint schemes on the web site are copyrighted by real "CROATIA AIRLINES" and only we have written permission to use it. The documents, texts, pictures and other files on the web site and forum are copyrighted by their respective authors.

2. Croatia Airlines Virtual

2.1. Signing up for Croatia Airlines Virtual

When you decide you would like to become a Croatia Airlines Virtual pilot and you are happy with the rules and regulations set in this document, go to the registration form www.croatia-virtual.com.hr/index.php/registration and complete all required fields.

Once a staff member reviews your application you will receive an e-mail with direction to go on forum page "New Pilots" and write something about yourself. You will be given a temporary pilot ID and a password. You will need the password when you log in.

After that you need to submit the ENTRY EXAM in next 14 days. You can find it on main web page. If you pass the ENTRY EXAM your application is approved and you are now a full member of Croatia Airlines Virtual. You will be able to review and update your pilot profile and begin flying. You will then have up to 30 days to file your first flight. In the event that the first pirep is not filed in 30 days upon registration, you will unfortunately be removed from the system with any warnings.

2.2. Activity policy

All members are subject to the activity policy. To remain active members of Croatia Airlines Virtual, one flight must be submitted within 90 days, and this pattern then continues throughout the entirety of a pilot's membership.

If the minimum time to file a flight has passed (180 days), an automated warning e-mail will be sent to the e-mail address which we have on file (from your profile) notifying you that you have overstepped the 180 days. At this point you will be set to "Inactive" or "Retired".

Failure to remain active or submitting at least one flight in next 180 days after you have received warning e-mail will lead to permanent deletion of the user's account. If you can't fly for an extended period of time please inform the management of this to avoid your name being removed from the system.

2.3. Leave Policy

In any time pilot can send e-mail to management, where he can ask for leaving the company and deleting the account. In that case all your information will be deleted from our database.

In all other cases of inactivity (Retired status) your information are never deleted from our database. All that is needed after a period of inactivity is to log a flight any your status will be reinstated. After one year of inactivity all your information will be deleted from our database.

2.4. Croatia Airlines Virtual on web

Croatia Airlines Virtual has own web site on address www.croatia-virtual.com.hr
You need your Pilot ID and password for access to web site and forum. If you forgot your password, you have to click on Retrieve password on Log In page.
All the logos and the paint schemes are copyrighted by real airliner "CROATIA AIRLINES".

2.5. Forum board

Every pilot is welcome to participate in the discussions. Signing for forum is automatically done when you become full member of Croatia Airlines Virtual
You can use the forum for:

- Asking questions and solving problems
- Suggesting new improvements and ideas
- Giving your opinion about operations and systems
- Discussing online events
- General discussion about flying or flight simulation
- Posting screenshots

Regulations to use the forum:

- Signature picture must not exceed 180 pixels in height and 40 KB in size
- Don't create new topics about subjects that were discussed before in the forum, please make a search before posting if you are a new member. Also post topics in the appropriate thread. You can choose English or Croatian part of forum.
- Don't advertise for other virtual airlines, virtual/real companies or teams on the forum (except FS design teams, online events).
- Don't use offensive, signatures, signature pictures. Don't post anything that can offend other pilots (e.g. no offensive or vulgar language, swearing, flaming, racism).

- Don't post messages about political views; a flight simulation forum is not the right place to discuss politics. There are enough other places on the Internet where you can do that.
- If the posts of another user offend you, please contact him/her in private or contact the management to explain the situation instead of starting flame wars on the forum. If you fail to comply with these regulations, you might receive a warning, be banned from the forum or be suspended as a pilot with or without the option of re-joining.

2.6. Contact

If you ever have a question that can not be openly asked on the forums or you would just like to get in touch with a member of staff you can do so by sending an AIRMAIL which you can find on your Profile page or filling the Contact Us form from main web page or sending e-mail to CEO info@croatia-virtual.com.hr

3. Flight Operations

3.1. Fly briefing

A virtual airline simulates, to a certain extent, the operations of a real-world with its own fleet, livery and timetables. However the main difference from a real airline is that flights are flown in the virtual world of Microsoft Flight Simulator or X-Plane.

We are so called "open company". We don't ask that you have certain rank for flying the plane, we don't require pilots to gain hundreds of flight hours to get promoted, we don't assign flights to pilots, we don't ask you if you are flying online or offline, all we want from you is that you are flying.

How to fly for us is here in a short summary:

- Download and install an ACARS system *CAVacars* from our page with tutorial how to use it,
- Select a flight from the schedule or fly a charter flight,
- Fly the selected flight with the selected plane in Microsoft Flight Simulator or X-Plane. Please comply with our regulations and restrictions regarding the flights. You can fly either offline (not connected to the Internet) or online (e.g. on the IVAO or VATSIM networks)
- Submit the flight report via the ACARS system. Your hours will be updated and you will advance in rank if you reach a certain number of flight hours.

3.2. Flight Plans and ACARS systems

As we said before we are simulating the operations of the Real Life "Croatia Airlines", who is a major Airline operator in Croatia. All schedules and information inside regarding flight plans are received from "Croatia Airlines". Pilots are free to change the flight plans and adapt them to his needs. Also you can use any third party software to create flight plan including those on online web pages.

The Croatia Airlines Virtual pirep system is based on a unique and ground breaking system created to make flight reporting easy and reliable. The system backbone is on the phpVMS system utilizing any of the following ACARS systems: *CAVacars* or filing pireps directly from the website.

It is imperative that you calibrate your ACARS system as it is the best and fastest way to get your flights logged and approved.

3.3. Croatia Airlines Virtual Regulations For Flight

Some of the minimum rules for flying for Croatia Airlines Virtual are set below, these must be met, and as representatives of the airline we rely on our members to portray the group as professional and friendly.

- Due to fact that all our schedules are short distance tour it is forbidden to fly at a simulation rate higher than 1x.
- Your flights must not overlap (e.g. you can't finish a flight at 18:20 and start the next one at 11:50 the same day).
- Don't pause your flight.
- You are not allowed to save a flight and continue it later as flights have to be reported only via one pIREP.
- On long flights, check the status of the plane at least every 10-15 minutes especially even if you are not flying online.
- We hope you are familiar with the basics of flying, navigation and communications with ATC so if possible, fly realistically (e.g. use the charts, use realistic flight plans...)
- If you don't use the *CAVacars* online, make notes during the flight so later you can fill in the pilot report easily.
- If you fly a scheduled flight, charter flight, Mission, Tour or Event on IVAO, report it on the IVAO schedules page too. Please don't report pIREPs on IVAO under Virtual Company section, even if you flew with a Croatia Airlines Virtual callsign. We are connected to IVAO and IVAO tracks our flights.

3.4. Online flying on network (IVAO or VATSIM)

Flying online is fun, but you should try it only when you are an experienced FS pilot and you are familiar with things like navigation, SID/STAR charts, METAR reports etc. If you aren't yet, we recommend that you contact our Training Manager on tmanager@croatia-virtual.com.hr

During ONLINE (IVAO/ VATSIM) flight follow these simple rules:

- Always log in with your real name to the network.
- Connect only when you intend to finish your flight (and not for just a takeoff etc).
- Always put your plane at the gates or parking before you connect to the network.
- Using the SLEW mode while online is not accepted (pushback can be done with the Shift+P command or using P/B button on IVAO or VATSIM software).
- Do not pause while online as it may disrupt the normal flow of traffic (imagine the approach controller who has just separated all the local traffic at a busy airport, and then someone pauses on final approach).
- You should not leave your computer while flying online, especially in a controlled area as you might receive important information or instructions at any time. If you have to leave the simulator for a short time during the flight, let the ATC know!
- Simulating a hijack is not permitted and may lead to exclusion from the network.
- Military flights are allowed, but it's forbidden to simulate war actions.
- Don't increase your flight simulation rate when flying online.
- If you are in controlled airspace, don't perform flight operations without the approval of the ATC (so no unauthorized taxi, take-off, landing) and don't leave his/her frequency without his/her permission.
- Fly a plane that you know well. Don't experiment with new aircraft or panels while flying online.
- Never put "No charts on board" in the remarks of the flight plan.
- If you use voice, don't interrupt the transmissions of other pilots/controllers! If a controller issues an instruction for another pilot, wait for the pilot to read back before transmitting your message.
- You may encounter inexperienced controllers or pilots – be patient and helpful.
- Do not be intrusive of an aerodrome or its operation when under UNICOM.
- Don't use vulgar or offensive language, don't swear or flame or you will be excluded from the network.
- If you are offended by the messages or by the behavior of a pilot or ATC, you may contact a Supervisor and explain to him/her the situation.

If any of these are seen or reported then we will take steps to put pilot through the appropriate training required to further help him understand the use of charts or procedures.

3.5. Schedules flights

As with real-world airlines, we have our own scheduled flights. Schedules that we use is copy of real life schedules that we get from real airliner "Croatia Airlines". The online schedules can be accessed via our web page, by clicking on Flight Operations and Real Life Schedules or Today's Schedules. Searching the database is fairly self-explanatory. All pilots can fly all the scheduled flights with no restrictions based on rank and aircraft type. All schedule departing and arriving times are displayed for realism only and do not serve as a rule to be obeyed, pilot may fly any flight at any time.

3.6. Codeshare flights

As we simulate the operations of real airliner "Croatia Airlines", and due to fact that "Croatia Airlines" is member of "Star Alliance Group" they schare some flights to destinations with they partners. The Codeshare online schedules can be accessed via our web page, by clicking on Flight Operations and Codeshare Schedules. All pilots can fly all the Codeshare flights with no restrictions based on rank and aircraft type. All schedule departing and arriving times are displayed for realism only and do not serve as a rule to be obeyed, pilot may fly any flight at any time.

3.7. Charter flights

Charter flight are flight that pilot can fly from/to destinations that are not in Croatia Airline Virtual regular schedule. The flights must be submitted via *CAVacars* reporting system. How to fill a Charter flight is explained in *CAVacars* Manual. For Charter flights pilots can use only airplanes that are exists in our fleet. Using another type of airplane is not permitted.

There are no limitations of charter flights that pilot can fly per month.

3.8. Events

Events are something that will be regularly advertised within Croatia Airlines Virtual, such as FLY-IN, group flights or celebratory events. These flights are purely social.

During an event Croatia Airlines Virtual Pilot ID will be used as your flight numbers. If should there be any requirements such as aircraft restrictions or special instructions these will be found on the events details pages.

During events we will establish a Company channel on our TeamSpeak3 Server. To participate in conversation all you need is to download latest TeamSpeak3 Client and ask staff members via AIRMAIL for password. Purpose of channel is that all participants on event can communicate during event. Also on that channel, leader pilot in event will give all necessary information regarding event, before, during and at the end of event.

3.9. Missions

From time to time our Flight Manager will create Missions. Missions are often intended for non schedule flight and they are related to important events in everyday life. Report it using the *CAVacars* system or pirep on web page, with the flight number corespondent to pilot ID number. Note that you may complete every mission pack only once. For every sucesfull completing the mission pilots will get badge for that misson.

3.10. Company IFR Tours

If pilot like they can fly and report Company tours. Check Flight Operation - IFR Tours web page for lists of the company tours. Ours Company tours are quite different than the standard Tours which pilot can find on another virtual airlines. Every flight will be evaluated according to certain criteria, which relate to the accuracy and planning for every single flight. Please pay attention on everything that is stated on the individual tour pages.

3.11. Submitting the Flight Report

In our company we use **CAVacars** software for recording and submitting a pilot flight. *CAVacars* is a flight reporting system designed to be used with the Microsoft Flight Simulator series. This system allows tracking a pilot's flights and record pertinent data for PIREP submission. *CAVacars* software can be downloaded from our web site with easy to use manual and instructions. Normally pilot will start using *CAVacars* before he start his flight and submit the pilot report after he ended his flight. If pilot encountered any problem with *CAVacars* software during flight he can submit the flight data manually using the PIREP on our web page and put in Comments explanation of problem in short words.

Here's a short instructions how to fill the PIREP manually:

Pilot ID – Your ID at Croatia Airlines Virtual.

Password - Your password at Croatia Airlines Virtual. If you lost your password please contact the management.

Select Aircraft – Select the aircraft you completed the flight with.

Flight Number – The flight number as it appears in the Schedule. Please refer to the Schedule if you don't know the number of the flight you completed. If you flying a charter flight or submitting a report from event flight use your Pilot ID.

Flight Level - Cruising flight level in feet.

Departure ICAO - Departing airport in ICAO form (4 letters).

Arrival ICAO - Arriving airport in ICAO form (4 letters).

Passengers – The number of virtual passengers on the aircraft you flew.

Route - enter here the route you're really flew.

Comments – You can enter here remarks or suggestions about the flight or about the airplane, problems and difficulties during the flight.

4. Standard Operating Procedures

4.1 Flight number and callsign

Pilot flight number and callsign when flying should be:

Using schedules for flight:

CTN (official ICAO Croatia Airlines callsign) and the last 3 or 4 digits from schedule. If you use bid from web site then the data will be entered automatically. (e.g. scheduled flight is CTN650, use flight number and callsign CTN650).

The accepted voice callsign is CROATIA, so CTN650 would read "Croatia six five zero".

Using charter for flight:

CTN (official ICAO Croatia Airlines callsign) and the last 3 digits of your pilot ID (e.g. if you're CTN808, use flight number and callsign CTN808).

The accepted voice callsign is CROATIA, so CTN808 would read "Croatia eight zero eight".

Flight number and callsign on event and mission flights:

CTN (official ICAO Croatia Airlines callsign) and the last 3 digits of your pilot ID (e.g. if you're CTN808, use flight number and callsign CTN808).

The accepted voice callsign is CROATIA, so CTN808 would read "Croatia eight zero eight".

4.2. Flight plans and routing

Our database will provide complete flight plan with route for pilots who select to fly scheduled flights. All information of flight plan will be copied to temporary file that pilots can download for flying. For now this option is only available for IVAO network. After a pilot bids a flight via Croatia Airlines Virtual Schedule web page, a pilot can download a full flight plan by opening Flight Operation and selecting IVAP Load Flight Plan.

The route shown however does not need to be adhered, pilot may plan your own flight if he wish with whatever route database he is happy with as long as they comply with Croatia Airlines Virtual Regulations for flight.

4.3. Simulation Regulations

While flying for Croatia Airlines Virtual, the following apply in regards to the simulator:

- Flight simulation rate must be set to 1x,
- Fuel must not be set to unlimited,
- Slew must never be used if pilot fly online,
- Pause before TOD or waypoint not to be checked.

5. Fleet

Main Croatia Airlines Virtual fleet is same as real "CROATIA AIRLINES" fleet.

We operate with modern fleet of AIRBUS aircrafts including type A319 and A320 and fleet of Bombardier Dash 8-Q400.

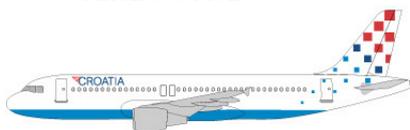
5.1 Aircraft Information

AIRBUS A319



Number of aircraft	Number of seats	Wing span	Fuselage length	Max. take-off weight
4	132	34.10 m	33.84 m	70000 kg
Max. cruising altitude	Wing area	Max. cruising speed	Engines	
11900 m	122.40 m ²	834 km/h (450 KTS)	2 x CFM56	

AIRBUS A320



Number of aircraft	Number of seats	Wing span	Fuselage length	Max. take-off weight
3	162/164	34.10 m	37.60 m	73500 kg
Max. cruising altitude	Wing area	Max. cruising speed	Engines	
11920 m	122.40 m ²	834 km/h (450 KTS)	2 x CFM56	

Dash 8-Q400



Number of aircraft	Number of seats	Wing span	Fuselage length	Max. take-off weight
6	76	28.42 m	32.83 m	29257 kg
Max. cruising altitude	Wing area	Max. cruising speed	Engines	
7620 m	63.08 m ²	667 km/h (360 KTS)	2 x Pratt & Whitney, PW 150A	

5.2. Additional aircraft for use with ACARS system

All flights that are logged by our **CAVacars** system on our site, and are not performed by aircraft in the fleet, will be automatically rejected. The only exception (due to the lack of well-simulated aircraft for FS) that instead:

- A319 = B737-700 / (IVAO MTL: 737-200 CTN),
- A319 = B462 / (IVAO MTL: BAe 146-200 Croatia Airlines CTN),
- A320 = B737-800 / (IVAO MTL: 737-200 CTN),
- DH8D = ATR-72 / (IVAO MTL: De Havilland Dash 8-Q400 Croatia Airlines CTN).

Once again, please note that this only applies to flights that are reported by **CAVacars** system on our website.

6. Restrictions

6.1 Other Virtual Airlines

Currently there's no restriction regarding flying for other virtual airlines. You may become part of other virtual airlines, or join Croatia Airline Virtual if you are already part of other virtual airlines. Flying for other virtual airlines and submitting Pirep for that flight to our company will not be tolerated.

6.2 Flight Frequency

We don't demand that pilot must have certain number of flights. We are asking nothing more or less what is stated in our Activity policy. As long as a pilot follow the rules in Activity policy he will be the active member of Croatia Airlines Virtual.

6.3 Warnings and exclusion from Virtual Airline

Make sure that you comply with all the rules and regulations in this Operations Manual to give yourself and other pilots a more enjoyable time at Croatia Airlines Virtual. The Croatia Airlines Virtual Staff reserves the right to exclude any pilot of Croatia Airlines Virtual without previous warning and without the option of rejoining. Note that it's the Staff's job to decide if a pilot should get a warning or be excluded from the airline.

Enjoy flying with us,

CAV Staff