



# Pilot Handbook

January 2021

The inspiration of Hong Kong

## Welcome Message

A very warm welcome from the **CX Virtual** staff team! In this handbook, you will find all the required information and regulations that you need to know as a pilot in our company. This handbook will be updated on a periodical basis to make sure our services are up to the required standard based on our company mission and core values. Thank you and enjoy your career with **CX Virtual**!

Ryan Yung  
Chief Executive Officer

## Section 1: Introduction to the Company

### 1.1: Brief Introduction

**CX Virtual** was founded in 2019 by a group of Hong Kong-based flight simulation enthusiasts with the aim to recreate the operations of the real-world Cathay Pacific Airways, its subsidiaries and other related airlines under the “as real as it gets” principle. On top of the modern schedules from Chek Lap Kok International Airport, we have a special focus on retro operations from our former base at Kai Tak International Airport using our historic fleet.

### 1.2: Mission and Core Values

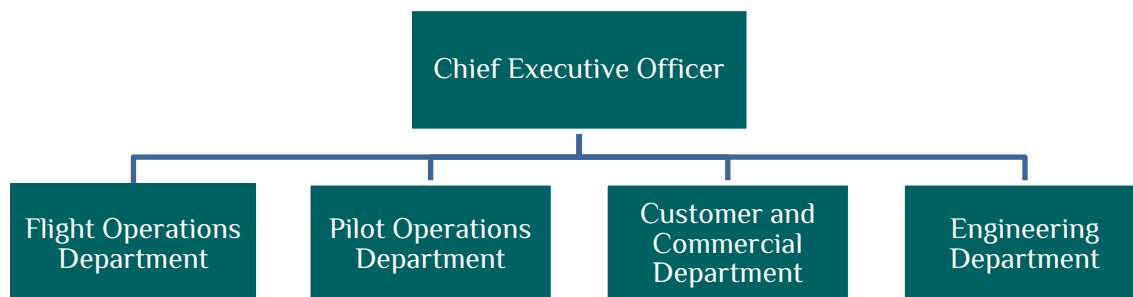
Mission: **CX Virtual** (“CPAv” hereafter) is set up to simulate the real-world flight operations of Cathay Pacific Airways (“CX” hereafter), its affiliates and other related airlines on flight simulator. CPAv shall recreate the operations of the real-world equivalent on the principle of “as real as it gets” and to provide an open, welcoming learning environment for our pilots while maintaining a certain degree of professionalism.

Core Values:

1. To serve the flight simulation community by providing an educational and supportive environment for all flight simulation enthusiasts with no limitations on nationality, ethnicity, sexual orientation and age etc.
2. To advance the knowledge and skills of virtual pilots in aviation and flight simulation.
3. To act as a stepping stone for aspiring pilots to get into the aviation industry
4. To promote and develop the hobby of flight simulation to members of the public.
5. To perform flight operations on flight simulation networks in a professional manner

### 1.3: Organisational Structure

The company is led by the Chief Executive Officer(CEO). Under the direction of the CEO, department directors and their team complete different tasks in their own fields. The CEO and the department directors form the Board of Directors which directs the company in general. The organisational chart is included as a reference:



### 1.4: Descriptions of the Board and Departments

Position	Duties
Board of Directors	<ul style="list-style-type: none"> <li>✈ General direction of the company</li> <li>✈ Manage Business Enquiries</li> <li>✈ Appoint and dismiss staff members</li> <li>✈ Handle and resolve disputes and complaints</li> </ul>
Flight Operations Department	<ul style="list-style-type: none"> <li>✈ Manage flight schedules and fleet information</li> <li>✈ Manage Pilot Reports (PIREPs)</li> <li>✈ Manage pilot training</li> </ul>
Pilot Operations Department	<ul style="list-style-type: none"> <li>✈ Manage new pilot applications</li> <li>✈ Manage Leave of Absence (LoA) applications</li> <li>✈ Manage pilot promotions</li> <li>✈ Handle complaints and disciplinary actions</li> </ul>
Customer and Commercial Department	<ul style="list-style-type: none"> <li>✈ Manage social media channels</li> <li>✈ Promoting the airline</li> <li>✈ Plan events and activities for pilots</li> </ul>
Engineering Department	<ul style="list-style-type: none"> <li>✈ Manage the website and servers</li> <li>✈ Ensure data security</li> <li>✈ Support on website and smartCARS issues</li> </ul>

## 1.5: Contact Details

<p style="text-align: center;"><b>Chief Executive Officer</b></p> <ul style="list-style-type: none"> <li>✈ For any business enquiries</li> <li>✈ For appeals on any disciplinary actions imposed on pilots</li> <li>✈ For staff position applications</li> </ul>	<p style="text-align: center;">Ryan Yung <a href="mailto:ceo@cxvirtual.hk">ceo@cxvirtual.hk</a></p>
<p style="text-align: center;"><b>Director Flight Operations</b></p> <ul style="list-style-type: none"> <li>✈ For all enquiries on flight schedules</li> <li>✈ For enquiries on PIREPs</li> <li>✈ For all enquiries on pilot training</li> </ul>	<p style="text-align: center;">Angus Lai <a href="mailto:dfo@cxvirtual.hk">dfo@cxvirtual.hk</a></p>
<p style="text-align: center;"><b>Director Pilot Operations</b></p> <ul style="list-style-type: none"> <li>✈ For pilot promotion and LoA applications</li> <li>✈ For complaints on disciplinary issues</li> </ul>	<p style="text-align: center;">Ken Kwok <a href="mailto:dpo@cxvirtual.hk">dpo@cxvirtual.hk</a></p>
<p style="text-align: center;"><b>Director Customer and Commercial</b></p> <ul style="list-style-type: none"> <li>✈ For general enquiries on events and collaboration requests</li> </ul>	<p style="text-align: center;">VACANT <b>Please email the CEO for all enquiries</b></p>
<p style="text-align: center;"><b>Director Engineering</b></p> <ul style="list-style-type: none"> <li>✈ For support on the website and smartCARS</li> </ul>	<p style="text-align: center;">Thomas Kan</p>

Should you have any enquiry, please send an e-mail to [enquiry@cxvirtual.hk](mailto:enquiry@cxvirtual.hk).

## Section 2: Regulations

### 2.1: Pilot Membership Application Policy

In order to be granted a pilot position in the airline, the application must fulfill the following requirements:

1. Must be at least 13 years old at the time of application
2. Registered as a member of at least the Virtual Air Traffic Simulation Network (VATSIM) with no major disciplinary history a year prior to the application and is not suspended
3. Must own a legal and legitimate copy of one or more of the following flight simulator(s):
  - a. Lockheed Martin Prepar3d (Any Version)
  - b. Microsoft Flight Simulator X/2004 (Any Version)
  - c. Laminar Research X-Plane 10/11
4. Agree to conform to all of the policies and regulations as stated in this handbook and the Code of Conduct of VATSIM
5. Pass a short test on basic piloting skills
  - a. The test consists of 10 questions on basic piloting skills and company policies
  - b. The applicant must answer ALL questions correctly
  - c. The applicant will be informed of any wrong answers shall there be any. Applicants have a total of three attempts to complete the test. Shall he/she fail the test for three consecutive times, he/she has a waiting time of 14 days before he/she is allowed to retake the test.

### 2.2: Pilot Activity Policy

All pilots must have an active status in the airline in order to enjoy all the privileges as a pilot. A pilot will be listed as inactive if one of the following requirements are not met:

1. The pilot has flown on 1 flight in a 30 day period, or
2. The pilot has flown on 3 flights in a 90 day period

After a pilot is listed as inactive, he/she has a period of 90 days to fly 1 flight in order to regain his/her active status in the airline. If the above conditions are not met, the pilot will be dismissed from the airline. Pilots who are dismissed from the airline are welcome to apply for a pilot position again at a later date but might be subject to additional checks and interviews by the Pilot Operations Department to ensure that he/she will comply with the activity requirements from now on.

## 2.3: Website Policy

By accessing “**CX Virtual**” (Hereinafter “we”, “us”, “our”, “<https://cxvirtual.hk/>”), you agree to be legally bound by the following terms. If you do not agree to be legally bound by all of the following terms then please do not access and/or use the “**CX Virtual**” website.

1. The login credentials that are provided to you serve as your individual membership identification. You may not under any circumstances provide, seek or obtain permission of your own or another individual's credentials in the course of performing **CX Virtual** operations.
2. Pilots are required to use their real name when applying for a pilot position. Incomplete, incorrect or misleading information will result in the suspension of the account and the dismissal from **CX Virtual**.
3. You may only register for and hold only one account.
4. All pilots must provide a valid email address. The Pilot Operations Department must be informed shall there be any changes in email address. Pilots with invalid email addresses will be dismissed from **CX Virtual**.
5. All pilots must fly at least one flight within the first 30 days after successful completion of registration. Failure to conform with the above policy will lead to the dismissal from **CX Virtual**.
6. All flights must represent a valid **CX Virtual** flight as assigned by the Flight Operations Department on the website. The correct aircraft and livery must be used for all flights.
7. Whilst pilots can fly for more than one virtual airline, we do not allow pilots to fly for two or more virtual airlines simultaneously on the same flight. Such an offence might lead to the permanent dismissal from **CX Virtual**.
8. **CX Virtual** reserves the right to suspend or dismiss any pilots from the airline if this or any other relevant policy has been violated. Pilots may appeal the suspension or dismissal to the Chief Executive Officer of **CX Virtual** whose decision shall be final.
9. **CX Virtual** does not approve of pilots who are in any staff or management positions in other virtual airlines. If a pilot is suspected of being a staff member in a competing virtual airline, the pilot shall be permanently dismissed from the airline immediately without notice. No appeal will be offered to the pilot. Any pilots who leaked sensitive materials and information of **CX Virtual** but do not hold any staff or management position in other virtual airlines are also subject to this policy.
10. Pilots shall acknowledge and conform to policies and regulations on flight simulation networks such as VATSIM when flying online. The VATSIM Code of Conduct must be strictly followed at all times.
11. Pilots are to be courteous and respectful to other pilots and staff members at all times. Any threats, harassment or unwarranted comments directed to other members in **CX Virtual** will not be tolerated.

12. Pilots represent **CX Virtual** as a whole at all times when accessing other external sources on the Internet. Pilots should be made aware that they should not undertake any action that would bring harm to the reputation of **CX Virtual**, including, but not limited to misrepresenting oneself to another organisation, breaking the rules and guidelines of another organisation, or making derogatory statements about **CX Virtual**.
13. Pilots are required to use English for all formal communications with the airline. Chinese can be used for informal communications (e.g. Discord or other kinds of social media). However, shall there be any discrepancy between the English and Chinese versions of any official documents and communications from **CX Virtual**, the English version shall always prevail. Pilots are required to use English only for all flight operations including flight planning and procedures, pilot training and Air Traffic Control communications.
14. Shall any pilots require the use of Chinese in any kinds of informal communications, it is recommended that you use Traditional Chinese for the written text and Cantonese for the spoken language. Pilots can use Simplified Chinese and Mandarin (Putonghua) by all means but any official communications from the airline in Chinese will be in Traditional Chinese only due to it being the official form of Chinese text in Hong Kong.
15. **CX Virtual** reserves the right to update these terms without prior notification. Remaining updated relies solely on the pilot. Violations of the subject policy may result in a temporary suspension, permanent dismissal or other form of disciplinary procedure to the concerned pilot.

## Section 2.4: Discord Policy

1. Pilots must not release this server information to anyone outside **CX Virtual**.
2. Abusive, rude, impolite or any language that is deemed disrespectful will not be tolerated.
3. Discussion that is sexual, political, race-orientated and religious in nature or violates universal moral standards is prohibited.
4. Pilots are prohibited from bullying, mocking or disrespecting other pilots and staff members in any way at any time.
5. Pilots must respect the use of text channels as outlined in the pinned post.
6. Advertising of outside organisations except **CX Virtual** partner organisations (e.g. VATSIM, TFDi Design for smartCARS) is not permitted under any circumstances.
7. Any conversation supporting, encouraging or facilitating criminal and/or illegal behaviour including the pirating of software will not be tolerated.
8. Pilots must adhere to all staff directions while on the Discord Server.
9. Voice changing or altering software is prohibited from use at all times when connected to any voice channels.
10. Pilots must use their full registered name on **CX Virtual** and their pilot ID in their nicknames whilst connected to this server.
11. Spam messaging text chats is prohibited.
12. Constant spam messaging to a direct staff and unnecessary tagging is not permitted.
13. **CX Virtual** reserves the right to update these terms without prior notification. Remaining updated relies solely on the pilot
14. Sharing sensitive or private and confidential information without prior permission from a member of staff is not permitted.

## 2.5: smartCARS Policy






1. **CX Virtual** has the right to reject a PIREP without prior notice. Pilots shall contact the Flight Operations Department within 7 days after the filing of the said PIREP shall there be any enquiries on the PIREP.
2. Pilots are to follow the guidelines set in place in the pilot handbook in regards to PIREPs.
3. Pilots are not allowed to bully, mock or disrespect other pilots, members of staff and other smartCARS users at any time through the public and airline chat box in smartCARS.
4. Pilots are admonished to keep all chat in smartCARS in regards to aviation, flight simulation and **CX Virtual**. Any discussions of illegal acts or those going against **CX Virtual** policies are prohibited.



## Section 3: Pilot Operations and Training

### 3.1: Rank Structure

Pilots will climb through the rank structure gradually when you fly with **CX Virtual** and gain more flight hours. As you get promoted to a more senior rank, you will gain more privileges mainly regarding flights that you are allowed to fly on. The below table summarises the rank structure of **CX Virtual** and the privileges and limitations of different ranks:

Rank	Privileges and Limitations
<b>Initial Operating Experience</b> (All new pilots do not have a rank until the completion of their first flight)	<ul style="list-style-type: none"> <li>✘ Can fly on all flights not longer than 3500nm</li> <li>✘ Cannot fly on any codeshare or oneworld flights</li> <li>✘ Cannot fly to any dangerous airports</li> <li>✘ Cannot change to another hub</li> </ul>
<b>Second Officer</b> 	<ul style="list-style-type: none"> <li>✘ Can fly on all flights not longer than 3500nm</li> <li>✘ Cannot fly on any codeshare or oneworld flights</li> <li>✘ Cannot fly to any dangerous airports</li> <li>✘ Cannot change to another hub</li> </ul>
<b>First Officer</b> 	<ul style="list-style-type: none"> <li>✘ Can fly on Cathay Group flights not longer than 6000nm</li> <li>✘ Cannot fly on any codeshare or oneworld flights</li> <li>✘ Can fly to Level 1 dangerous airports (Refer to Appendix B)</li> </ul>
<b>Senior First Officer</b> 	<ul style="list-style-type: none"> <li>✘ Can fly on all flights in the system timetable</li> <li>✘ Enables charter operations</li> <li>✘ Can fly to Level 2 dangerous airports</li> </ul>
<b>Captain</b> 	<ul style="list-style-type: none"> <li>✘ All privileges of a Senior First Officer</li> <li>✘ Can fly to all dangerous airports</li> </ul>
<b>Senior Captain</b> 	<ul style="list-style-type: none"> <li>✘ All privileges of a Captain</li> </ul>

On top of the above ranks, Captains and Senior Captains who are a part of the Training Team (To be implemented in the future) can be appointed as Training Captains and Senior Training Captains respectively. Such ranks are not permanent and will be removed once the said pilot is no longer in the Training Team. This does not affect their permanent rank as a Captain or a Senior Captain.

### 3.2: Promotion Requirements and Application

A rank promotion will not be automatically conferred once you have met all the requirements. Pilots shall email the Pilot Operations Department to apply for a promotion once you have met all the requirements. The Pilot Operations Department will then review your profile to confirm or reject your application. All applications will be reviewed within 72 hours. The table below summarises the requirements for promotion of all ranks:

Current Rank	Next Rank	Requirements
Initial Operating Experience	Second Officer/ First Officer	✈ Will be automatically granted after the completion of First Flight
Second Officer	First Officer	✈ 150 hours of flight time with <b>CX Virtual</b> ✈ Flew to at least five different destinations excluding Hong Kong (VHHH/VHHX)
First Officer	Senior First Officer	✈ 400 hours of flight time with <b>CX Virtual</b> ✈ Pass a theory test
Senior First Officer	Captain	✈ 1600 hours of flight time with <b>CX Virtual</b> ✈ An On-time-performance (OTP) of $\pm 30$ minutes on at least 80% of all flights ✈ Figure will be calculated from the average flight time of all flights
Captain	Senior Captain	✈ 3000 hours of flight time with <b>CX Virtual</b>

### 3.3: Transfer Hours

**CX Virtual** accepts a maximum of **250** hours of transfer hours logged on **VATSIM** with any pilot callsign. Pilots with more than **150** hours logged as a pilot on **VATSIM** at the time of application will be accepted as direct entry First Officers after their first flight. Transfer hours should be automatically appended to your pilot account after your application and first flight is complete. The airline does not accept transfer hours from other virtual airlines and other flight simulation networks.

### 3.4: Leave of Absence

If a pilot expects that he/she cannot fulfill the activity requirements listed above, the pilot can apply for a Leave of Absence (LoA) from the airline to prevent him/herself from being inactive in the airline. The minimum duration for a LoA is 30 days and the maximum duration is 180 days. The LoA can be terminated prematurely if pilots are able to resume their duties before the expiry of the LoA. The activity requirements will be resumed once the LoA expires and pilots shall strictly follow the regulations thereafter. Pilots who will not be able to take flight duties for more than 180 days shall contact the Pilot Operations Department for extenuating circumstances.

### 3.5: Pilot Training

**CX Virtual** does not provide pilot training at our launch and does not require pilots to have a real-world standard in aviation knowledge. However, we have a team of staff with considerable real-world and online experiences in flight simulation so please do not hesitate to approach one of our members of staff for questions on flying in general or on an online environment. We expect to provide training to our pilots at a later date but details are not confirmed yet.

### 3.6: Pilot of the Month Award

To be implemented at a later date.

### 3.7: Disciplinary Actions

Pilots might be subject to disciplinary actions if they breach any policies and regulations stated in Section 2 of this handbook. For first offences of most breaches in regulations, the most severe form of punishment is the temporary suspension of the pilot from the airline, although in most cases we will issue warnings to pilots before we have to suspend someone. For continued offence of regulations, pilots might be subject to the permanent dismissal from the airline. The above guidelines apply to all breaches in regulations except those which are exceptionally severe in which the fixed disciplinary action has been stated in the respective clauses in section 2. Pilots are normally allowed to appeal the decision to the CEO. The CEO will then lead an independent investigation on the suspected pilot and the decision-making process of the Pilot Operations Department before making a decision to uphold or overturn the decision made by the Pilot Operations Department. Such decision is final.

## Section 4: Flight Operations

### 4.1: Flight Schedules

We strive to provide up-to-date modern schedules and historic schedules of the real-world Cathay Pacific Airways, its subsidiary airlines and other related airlines for our pilots to fly. For all enquiries and requests on flight schedules, please use the “route-requests” channel in our discord server or email the Flight Operations Department.

### 4.2: Jumpseat

All pilots must fly a flight from their current location. However, pilots are able to use the jumpseat system to be transferred to any location in our network. The use of the jumpseat system incurs a cost of pilot credits.

### 4.3: Hubs

All pilots in **CX Virtual** are based in Hong Kong, flying out from both the modern Chek Lap Kok International Airport (VHHH) and the historic Kai Tak International Airport (VHHX, former VHHH). Although more hubs might be created at a later date, pilots can fly on any routes in our system regardless of their hub location.

### 4.4: Pilot Reports (PIREPs)

All pilots are required to file a pilot report after completing their flight. PIREPs should normally be submitted via smartCARS, our official flight tracking software. However, shall there be any unexpected problems with smartCARS (e.g. smartCARS crashed mid-flight), pilots can submit a manual PIREP on our website. Manual PIREPs shall be submitted within 24 hours after the completion of the flight. Flights without a PIREP will be deemed as invalid and will not count to your flying hours with **CX Virtual**. The conditions for a valid PIREP are stated in Section 5 of this handbook.

### 4.5: Charter Operations

Pilots are allowed to do charter operations after they reach the rank of Senior First Officer. Such operations must be carried out in a Cathay Pacific Group aircraft (**CPA**, **HDA**, **HKE**, **AHK**). Points will be deducted on a 1 point to 1nm basis for the charter flight leg.

## Section 5: Standard Operating Procedures (SOP)

### 5.1: Introduction

Standard Operating Procedures are a set of instructions designed to help pilots in carrying out complex routine flight operations. Pilots are required to follow the SOP at all times to ensure the safety and efficiency of all flight operations of the airline. Any changes in the SOP shall be made known to all pilots as soon as possible to ensure the quality of our flight operations.

### 5.2: Flight Planning

#### 5.2.1: Time Setting

All departure and arrival times on our flight schedules are listed in the local times of the respective airports. However, we do not require pilots to fly on any flights according to the listed departure and arrival times. It is intended to provide pilots a reference of the real-world flight schedules. Pilots are welcome to follow the real-world timings to add a degree of realism.

#### 5.2.2: General Flight Planning

Pilots should use a reliable flight planning application or website for all flight planning. For payware we recommend Professional Flight Planner X (PFPX) and for freeware we recommend Simbrief.com (With an optional upgrade to link to the payware Navigraph AIRAC).

#### 5.2.3: Flight Routes

Pilots should refer to real world routings of their flight in their flight planning process. However, pilots are welcome to use any reasonable routes in their flight plan. Pilots must avoid flying over active warzones to prevent accidents.

#### 5.2.4: Cost Index

The cost index is a number inputted to the Flight Management System (FMS/FMC/FMGC etc.) to calculate the optimal speed of the aircraft in different flight stages in relation to fuel consumption. A higher cost index indicates higher speed for higher fuel consumption and a lower cost index indicates lower speed for lower fuel consumption. Pilots are requested to use the following cost indexes in their flight planning but pilots can choose any cost index up to 100 to meet schedule requirements.

#### Cathay Pacific Airways

- ✈ Boeing 747-400/8 (Pax and Cargo): 80
- ✈ Boeing 777 (All Variants): 60
- ✈ Airbus A330/340/350: 50

### Cathay Dragon (Dragonair)

✈ Airbus Fleet: 20

### HK Express

✈ Airbus Fleet: 10

✈ Boeing 737: Any Reasonable Value

### Air Hong Kong

✈ All Aircrafts: Any Reasonable Value

Pilots are free to choose any cost index on flights that are not operated by the Cathay group in our schedules.

## 5.2.5: Alternate Airports

Pilots are required to file at least one alternate airport for all **CX Virtual** flights. The airline also requires pilots to file an alternate airport in the VATSIM flight plan although it is not mandatory according to VATSIM regulations. Additional alternate airports shall be planned accordingly during ETOPS operations (Extended Twin Operations) when flying over areas with a limited number of suitable airports available for emergencies.

## 5.2.6: Flight Documents

Pilots shall refer to real-world charts including but not limited to aerodrome charts, SID/STAR charts, en-route charts and weather charts to assist with their flight planning. **CX Virtual** expects all pilots to have access to real-world charts through sources like real-world AIP, Chartfox, Jeppesen or Navigraph charts or other websites which reproduce reliable and accurate charts to ensure the safety of our flight operations.

## 5.2.7: Fuel Planning

Pilots are solely responsible for the amount of fuel taken on each flight. Although the fuel prediction on PFPX and Simbrief is mostly accurate, it is recommended to cross-check the amount of fuel required on other reliable platforms and sources. Pilots are allowed to take extra fuel as required for safety requirements such as severe weather conditions or aircraft flow control while flying in congested areas.

## 5.3: Flight Procedures

### 5.3.1: Online Flying

Although pilots are required to possess a valid non-suspended VATSIM account, it is not mandatory to fly online and pilots are welcome to fly offline whenever they feel so. Pilots are welcome to use VATSIM, IVAO or other flight simulation networks and other tracking software such as projectFLY. However, pilots should comply with all regulations and policies of the respective networks.

### 5.3.2: ATC Communications

Pilots are reminded to use English at all times for all ATC Communications regardless of location. Pilots shall comply with all ATC clearances and instructed unless it is deemed unnecessary or incorrect which might affect the safety of the flight.

### 5.3.2: Aircraft Selection

Pilots must use the correct aircraft type and the correct livery corresponding to the airline for all flights. The airline lists the aircraft type together with the seating configuration code as reference (if available) but pilots are not required to follow it strictly i.e. pilots are free to fly any aircraft of the correct aircraft type. Some aircraft types are available for substitution for another aircraft type. The full list of allowed aircraft substitution is listed in Appendix A of this handbook.

### 5.3.3: Simulator Pause, Time Acceleration and Slew

Time acceleration and the use of slew mode in flight are not allowed under any circumstances. However, slew mode is permitted before engine start up and after engine shut down. Time acceleration is permitted up to five seconds due to possible glitches in certain payware aircrafts. Pauses of a maximum total duration of 2 hours is allowed when flying offline. Simulator pause is not allowed unless absolutely necessary when flying online on VATSIM or other networks. Pilots should always comply with regulations of the respective networks on simulator pause, time acceleration and slew while flying online.

### 5.3.4: Overspeed and Stall

Pilots should comply with the 250kts speed limit when flying below 10000ft MSL and other airspace speed restrictions unless due to ATC clearance or performance requirements in which it should be stated clearly in the PIREP. Overspeeding and stalling the aircraft are very dangerous. A maximum of one minute of continuous overspeed and a maximum of 5 seconds of continuous stalling are allowed.

### 5.3.5: In-Flight Refuelling

In-flight refuelling is deemed unrealistic and unprofessional and is not permitted under any circumstances.

### 5.3.6: Landing Rate

Flights landing with an excessive landing rate is a safety hazard to our passengers and to the aircraft. All flights should land with a landing rate not greater than -600ft/min or +150ft/min as measured in smartCARS.

### 5.3.7: Emergencies and Diversions

Although highly unlikely, pilots may face different kinds of emergency situations during their flight and might have to divert to another airport. However, the airline only accepts weather-related diversions due to system constraints.

### 5.3.8: PIREP Policy

PIREPs are normally submitted via smartCARS which has automatically logged all required information for it during the flight. All flights must be completed (i.e. at least from engine start up to engine shut down) in order to submit a valid PIREP. However, shall smartCARS be unusable due to any reasons while flying online (e.g. smartCARS crashed mid-flight), pilots can submit a manual PIREP as required. Please note that it is not the preferred way to submit a PIREP and pilots are requested to use smartCARS to track all flights unless absolutely necessary. Also, manual PIREPs for offline flights are not allowed.

### 5.3.9: Manual PIREPs

A manual PIREP should contain at least the following information:

1. Flight Number/Callsign
2. Aircraft
3. Departure/Arrival Airport
4. Flight Time
5. Fuel Used
6. Log of Events
  - a. A Vatstats link or its equivalent to the flight should be provided. ProjectFLY flight log is not permitted.
  - b. The Vatstats flight log must include at least an hour after takeoff and at least an hour before landing for long haul flights. Flights shorter than 2 hours in duration must be connected to VATSIM for the whole flight.
7. Reason for submitting a manual PIREP



## Appendix A: Allowed Aircraft Substitution

### Cathay Pacific Airways

Original Aircraft	Substitution Aircraft
Airbus A340-200/300	Airbus A330-300/ A350-900/ Boeing 777-200/300(ER)
Airbus A340-600	Airbus A350-1000/ Boeing 777-200/300(ER)
Airbus A350-900/1000	Boeing 777-300(ER)
Airbus A350-1000	Airbus A350-900 (Flight Factor)
Boeing 707-320C	Lockheed L-1011 Tristar (Until Captain Sim releases their 707 for P3Dv4/5)
Boeing 777-200/300	Boeing 777-200LR/300ER (PMDG)
Boeing 747-400(ER)F	Boeing 747-8F
Boeing 747-8F	Boeing 747-400(ER)F
Boeing 747-200/300	Boeing 747-400
Convair CV-880	Boeing 707-320C
Douglas DC-3	Douglas DC-4/6

Douglas DC-4	Douglas DC-3/6
Lockheed L-188 Electra	Douglas DC-6
Vickers Viscount 760 (Ex Hong Kong Airways aircraft)	Douglas DC-6
Boeing 777-200/300	Airbus A330-300
Airbus A330-300	Boeing 777-200LR/300ER (PMDG)

\*\*\*Green Background denotes that the aircraft substitute policy only applies to CPA Historical Flights on or before 1998\*\*\*

**Cathay Dragon (Dragonair)**

Original Aircraft	Substitution Aircraft
All Airbus Fleet (A320/A321/A330)	All Airbus Fleet (A320/A321/A330)

**HK Express (Including former Hong Kong Express)**

Original Aircraft	Substitution Aircraft
All Airbus Fleet (A320/A320neo/A321)	All Airbus Fleet (A320/A320neo/A321)
Embraer ERJ-170LR	Embraer ERJ-170 (Any livery)

Air Hong Kong

Original Aircraft	Substitution Aircraft
Airbus A330-300F	Airbus A330-300 (Aerosoft addon with AHK Livery)
Airbus A300-600RF	Airbus A300B4-200 (Simcheck Addon)
Boeing 747-200F	Boeing 747-400F

Japan Airlines (Including all subsidiaries)

Original Aircraft	Substitution Aircraft
Airbus A350-900	Boeing 767-300(ER)/777-200/ 777-300/787-8
Boeing 767-300(ER)	Boeing 787-8
Boeing 777-200(ER)/300	Boeing 777-200LR/300ER (PMDG)
Boeing 787 All Variants	Boeing 787 All Variants
ATR 42-600	Saab 340B
Saab 340B	ATR 42-600

## Qatar Airways

Original Aircraft	Substitution Aircraft
Airbus A350-900	Boeing 787-9
Airbus A350-1000	Boeing 777-300ER
Airbus A380-800	Boeing 777-300ER/ Boeing 787-9

## Qantas (Including QantasLink)

Original Aircraft	Substitution Aircraft
Airbus A330-200	Airbus A330-300
Airbus A380-800	Boeing 787-9
De Havilland Canada Dash 8 All Variants	De Havilland Canada Dash 8 All Variants
Fokker 100	Boeing 717-200

## Finnair

Original Aircraft	Substitution Aircraft
Airbus A320 Family	Airbus A320 Family
Airbus A319/Embraer ERJ-190	Airbus A319/Embraer ERJ-190
Airbus A330-300	Airbus A350-900
Airbus A350-900	Airbus A330-300

Fiji Airways

Original Aircraft	Substitution Aircraft
Airbus A350-900	Airbus A330-200/300
Boeing 737-8 MAX	Boeing 737-800

British Airways

Original Aircraft	Substitution Aircraft
Airbus A320 Family	Airbus A320 Family
Airbus A350-1000	Boeing 777-300(ER)/ Boeing 787-10
Airbus A380-800	Boeing 747-400

## Appendix B: List of Dangerous Airports

### Level 1:

- ✈ Kai Tak International Airport (VHHX)
- ✈ Kathmandu Tribhuvan International Airport (VNKT)
- ✈ Toowoomba Wellcamp Airport (YBWW)
- ✈ Salzburg Airport (LOWS)
- ✈ Dubrovnik Airport (LDDU)
- ✈ Alanya Airport (LTFG)
- ✈ Quito Mariscal Sucre International Airport (SEQM)

### Level 2:

- ✈ Lord Howe Island Airport (YLHI)
- ✈ Queenstown Airport (NZQN)
- ✈ Innsbruck Airport (LOWI)
- ✈ Madeira Airport (LPMA)

### Level 3:

- ✈ London City Airport (EGLC)
- ✈ Gibraltar Airport (LXGB)

## Appendix C: List of Available Addon Aircrafts

Only aircraft types operated by Cathay group are included in this list

### Cathay Pacific Airways

Aircraft Type	Developer	Platform	Pay/Freeware	Livery
Douglas DC-3	Just Flight	FSX	Payware	NONE
	VSKYLABS	XP11	Payware	NONE
	Manfred Jahn	FSX/FSX:SE/P3D	Freeware	Available
	Aeroplane Heaven	P3Dv4	Payware	NONE
Douglas DC-4	Flight Replicas	P3Dv4	Payware	NONE
Douglas DC-6	PMDG	FSX/FSX:SE/P3Dv3/ P3Dv4/XP10/XP11	Payware	Available
	Just Flight	FSX	Payware	NONE
Lockheed L-188	NONE	NONE	NONE	NONE
Convair 880	NONE	NONE	NONE	NONE
Boeing 707-320C	Captain Sim	FSX/FSX:SE/P3Dv1-3	Payware	NONE
	Captain Sim	P3Dv4	Payware	NONE
Lockheed L-1011	Captain Sim	FSX/FSX:SE/P3Dv1-4	Payware	Available
Boeing 747-200B/F	Just Flight	P3Dv4/XP11	Payware	Available on release
Boeing 747-300	CLS	FSX/P3Dv1-3	Payware	Available
	Just Flight	P3Dv4/XP11	Payware	Unknown
Boeing 747-400/F/BCF/ERF	PMDG	FSX/FSX:SE/P3Dv1-4	Payware	Available
Airbus A330-300	Aerosoft	P3Dv4	Payware	Available
	Blackbox	FSX/FSX:SE/P3Dv1-4	Payware	Available

Airbus A340-200/300/600	Blackbox	FSX/FSX:SE/P3Dv1-4	Payware	Available
Boeing 777-200/300/300ER	PMDG	FSX/FSX:SE/P3Dv1-4	Payware	Available
	Captain Sim	FSX/FSX:SE/P3Dv1-4	Payware	Available
	Flight Factor	XP10/XP11	Payware	Available
Airbus A350-900	Flight Factor	XP11	Payware	Available

### Cathay Dragon (Dragonair)

Aircraft Type	Developer	Platform	Pay/Freeware	Livery
Boeing 737-200	Captain Sim	FSX/FSX:SE/P3Dv1-4	Payware	NONE
Lockheed L-1011	Captain Sim	FSX/FSX:SE/P3Dv1-4	Payware	Available
Airbus A320/A321	Aerosoft	P3Dv4	Payware	Available
	FSLabs	P3Dv4	Payware	Available
Airbus A320	JAR Design	XP10/XP11	Payware	Available
	Flight Factor	XP11	Payware	Available
Airbus A330-300	Aerosoft	P3Dv4	Payware	Available
	Blackbox	FSX/FSX:SE/P3Dv1-4	Payware	Available



## Air Hong Kong

Aircraft Type	Developer	Platform	Pay/Freeware	Livery
Airbus A300-600F	SimCheck	FSX	Payware	Available
	Just Flight	P3Dv4	Payware	Unknown
	Inibuilds	XP11	Payware	Unknown
Airbus A330-300	Aerosoft	P3Dv4	Payware	Available

## HK Express (Including former Hong Kong Express)

Aircraft Type	Developer	Platform	Pay/Freeware	Livery
Embraer ERJ-170	Feelthere	P3Dv4	Payware	NONE
Boeing 737-800	PMDG(NGX/u)	FSX/FSX:SE/P3Dv1-4	Payware	Available
	Zibo	XP11	Freeware	NONE
Airbus A320/A321	Aerosoft	P3Dv4	Payware	Available
	FSLabs	P3Dv4	Payware	Available
Airbus A320	JAR Design	XP10/XP11	Payware	NONE
	Flight Factor	XP11	Payware	NONE

\*\*\*Green Background denotes that the addon is in development\*\*\*