



Pilot Handbook

Document Version: **D**



About the Airline

Cape Air Virtual (CAV) is BVA's premier virtual airline, which seeks to simulate the operations of the real-world Cape Air airlines. Since 2009, Cape Air Virtual has been an incredible community within BVA: hosting events, training pilots, and providing a pilot tracking client, smartCARS—an airline management software that simulates the workings of real airline operations—to our pilots to further improve realism throughout the VATSIM community.

1) Purpose

CAV's Pilot Handbook establishes all the regulations of the virtual airline. Additionally, we outline the terms which our website and services are governed. Our Administration Team maintains this document and updates it periodically. If any errors were to be found, please report it to a member of the of the Administration Team. All the information presented in this document is/can be used on the Entrance Exam for Cape Air Virtual.

2) The Cape Air Virtual Administration Team

The Cape Air Virtual Administration Team (CAVA) is in charge of running the virtual airline's operations. Each member of the team is assigned a certain task carry out. More information about the members of CAVA and what their roles are can be found at our Administration Team page. Below you will find who is on the CAVA team with a brief description about their roles:

- **President/CEO:** Harry Murphine (KAP831)

The President/CEO oversees all airline operations. This member has all final say in administrative decisions. Any type of public relations affairs are passed through this member.

- **Vice President:** Ernesto Muniz-Samalot (KAP184)

The Vice President assists the President in operations of the airline. This member ensures the continuous maintenance of the facilities of CAV. Additionally, the Vice President ensures the operation functionality of the website.

- **HUBs/Events Manager:** John Johnson (KAP900)

The HUBs/Events Manager ensures the upkeep of airline events and HUB operations. This member seeks to promote airline interactions. Relations with other ARTCC's to coordinate events are handled by this member.

3) Your CAV Account

CAV operates a separate account that from your BVA and VATSIM accounts. Your BVA and VATSIM accounts is separate from our systems; any inquiries regarding your BVA account should be made to BVA Administration. CAV follows BVA's Privacy Policy and Terms of Use. All policies utilized in BVA apply to CAV.

Cape Air Virtual Admissions

To receive membership to CAV, you will require other memberships prior to applying to CAV. These are required as CAV participates with several communities, upholding their values and expectations.

1) **VATSIM Membership**

All pilots must hold a valid VATSIM membership. CAV operates explicitly on the VATSIM network. By holding a VATSIM membership, this ensures that you are able to connect to the VATSIM network, and that you hold a valid Boston Virtual ARTCC membership.

2) **Boston Virtual ARTCC Membership**

All pilots applying to CAV must hold a current BVA membership. BVA is CAV's community sponsor, covering our costs. Moreover, CAV holds a Letter of Agreement (LOA) with BVA ensuring that our operations correlate to their regulations set forth. CAV pilots must also meet BVA's Member Expectations. These expectations are enforced in CAV to ensure pilots are with knowledge of their expectations for CAV. Additionally, CAV enforces VATSIM's Code of Conduct.

4) **CAV Entrance Exam**

CAV holds an Entrance Exam for every pilot. Pilots must take this entrance exam in order to gain pilot status within the airline. This exam serves the purpose to ensure your BVA membership status and knowledge of CAV regulations & procedures. All material on the exam is gathered from CAV-provided documentation and BVA documentation. This exam is open note. Note that this exam does not register you *automatically* to become a CAV pilot. A separate application must be completed; all is outlined below.

a) **Requirements**

- Must successfully complete the exam
- Must pass the exam with a score of 80% or higher
- Must have a valid BVA membership to take exam

5) **CAV Website Application**

The website application to join CAV is straightforward and simple. The application serves to register you as a pilot to smartCARS and as a user to our website. General information will be collected in order to properly register you as a pilot and user. Once you complete the application, a confirmation email will be sent to the email you provided. This email serves the purpose to ensure your application was received and is in processing. In the email you will note that your account is NOT active (you're not able to log in to the website or smartCARS). One of the members of the Administration Team must go and review your application. Once the review is complete, your account will be activated with another email being sent to you with several pieces of information.

Airline Operations

1) Ranks

The rank system within Cape Air Virtual is based on pilot experience based on flight time and with progressions through BVA's Pilot Rating Program. The goal of the rank structure is to improve pilot competency, knowledge, and performance within the ATC system. More information on the rank system and the requirements for each rank can be found on our Ranks page or down below.

Obtaining rank promotions from within Cape Air Virtual requires three main elements: total logged flight time, successful completion of Pilot Ratings Program (PRP) training flights, and an evaluation of your PIREPS from smartCARS. Pilots wishing to receive promotions must submit a Promotion Request Form when they have achieved the above requirements for promotion. Listed below are the ranks that can be obtained in Cape Air Virtual and the requirements for each.

Trainee (TR)

Requirements:

- Successful completion of the CAV Entrance Exam and Website Application
- Activation of website account

A Trainee is a new member of Cape Air Virtual. These first few flights should be used to begin exploring the Cape Cod airspace and to familiarize with Cape Air Virtual aircraft. Start to familiarize yourself with the Pilot Rating Program (PRP). You can complete these flights and also use these flight hours toward your next upgrade. Completion of this curriculum is required to advance through the ranks.

First Officer (FO)

Requirements:

- Minimum of 10 hours CAV flight time
- Completion of PRP flights VFR 1-3 and IFR 1-3

FO's are becoming more familiar with Cape Air Virtual. There will be an oral examination as well as an evaluation of your PIREPs before being upgraded to FO. This rank should be used to complete the remaining PRP flights and master your aircraft of choice.

Senior First Officer (SFO)

Requirements:

- Minimum of 30 hours CAV flight time
- Completion of PRP training flights VFR 1-4 and IFR 1-7

SFO's have completed a good portion of their required PRP training and continue to improve their skills while working towards becoming a Captain. As a Senior member to the newer pilots, you are expected to calculate weight and balance, exhibit consistent checklist usage, and be able to communicate clearly and effectively with ATC.

Captain (CPT)

Requirements:

- Minimum of 60 hours CAV flight time
- Completion of PRP training flights VFR 1-4 and IFR 1-11

Upon reaching the CPT rank, Cape Air Virtual pilots are considered to be full-status pilots within the airline and may begin flying for Cape Air Elite. Having completed most of CAV's required lessons from the Pilot Ratings Program curriculum, CPT's are well trained and ready to put their advanced knowledge and skills to use. Cape Air Coded Routes are encouraged in their flight planning and communication with ATC. Weights and Balances, checklist usage, and clear and effective communication with ATC is still required.

Senior Captain (SCPT)

Requirements:

- Minimum of 95 hours CAV flight time
- Completion of PRP training flights VFR 1-6 and IFR 1-15

A SCPT is eligible to fly for both Cape Air, Elite, as well as Turbines Limited. Senior Captains are held to the highest standard of realism within the airline and are expected to assist in the training and mentoring of new pilots, acting as an example of excellence and professionalism.

Fleet Captain (FCPT)

Requirements:

- Minimum 150 hours of CAV flight time.
- Completion of all PRP training flights (VFR 1-6, IFR 1-20)

SCPT's who are seen as leaders, or believe themselves to be leaders, are encouraged to or may be asked to apply for this position. The FCPT takes an active role in the training of new pilots, as well as the advancement of the up-and-comers.

Pilot of the Month (POM)

Requirements:

- Successful completion of the required goal for the month
- Demonstrate understanding of the Rules & Regulations for Cape Air Virtual

Every month a POM is selected from the pilot pool. This selection is based on successful completion of the required month goal set forth by the Cape Air Virtual Administration Team. This rank will be held for a full month and then will be reset back to their original rank.

Chief Pilot (CP) (*not in use*)

Requirements:

- Obtained Rank of SCPT or FCPT
- Successfully submit a Promotion Request for the position
- Attend the interview session conducted by the CAV Administration Team

Every quarter, a CP will be selected by the Pilots from the pool of SCPT and FCPT. The Chief Pilot is considered a non-voting member of the Cape Air Virtual Administration (CAVA), and is welcome to provide ideas and input at regular meetings and represent the voice of the pilots. The position will rotate to another elected pilot every 6 months, or as necessary. A Chief Pilot may serve consecutive terms.

a) Promotions

When you feel you are ready for a rank promotion and have met all requirements, please [Contact Us](#) through our website to apply for the promotion. If you have met all requirements, you will receive more details, typically within 24-48 hours, regarding the promotion and scheduling for oral examination with the appropriate person, if applicable.

6) BVA's Pilot Ratings Program (PRP)

Completion of the [BVA Pilot Ratings Program \(PRP\)](#), is required for promotions. Oral examination questions will relate to knowledge gained from the PRP and other relevant

areas. Below are listed some regulations to follow when completing PRP flights and participating in the oral examination for promotion:

- All Cape Air Virtual pilots participating in PRP flights shall adhere to the rules and guidelines set forth by the Virtual FBO.
- PRP flights may be flown in any acceptable aircraft designated by the PRP requirements.
- PRP flights can be logged as flight time in smartCARS. The routes are open and available for bidding. These are charter flights to be filed with a normal callsign (N122XX).
- All lessons required for specific promotions must be completed before applications for promotion are submitted.
- To give Cape Air pilots an opportunity to improve their skills, CAV often holds events that aim to simulate real-world airline operations. Be sure to regularly check the CAV website, forums, Facebook pages, and your email for more information.
- If assistance is needed while completing a PRP flight, FBO coaches are available from BVA. There is no punishment for completing the flight with a coach.

Note: Pilots that do not wish to complete PRP flights **will not** be prevented from flying for Cape Air Virtual. However, these pilots will not be eligible for promotions.

Furthermore, pilots who do not adhere to the realism standards set forth by these regulations are subject to mandatory training in order to maintain their position with Cape Air Virtual.

7) Our Fleet

a) Cape Air

These flights are available to pilots of all ranks and are designed to promote short hops within the BVA with active engagement with Air Traffic Controllers. The Cape Air Virtual route system is based on the Cessna 402C (the real-world fleet aircraft of Cape Air). However, in the absence of a quality C402 for the flight simulator, Cape Air Virtual pilots may fly similar aircraft (freeware and/or payware) on these routes. Pilots may request additions to this list at any time.

Acceptable Replacements for C402

Default Baron 58 • BE58

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Flysimware Cessna 402C Businessliner • C402
Cessna 414A Chancellor • C414
Carenado Baron B58 • BE58
Carenado Cessna 340A • C340
RealAir Beechcraft Duke B60 • BE60
Flight1 Cessna 421C Golden Eagle • C421
WSSimulation PA-44 Seminole • PA44
Carenado PA-34 Seneca II • PA34
Flight1 BN-2 Islander • BN2P
Alabeo Cessna 404 Titan • C404

b) Cape Air Elite

Cape Air Virtual also caters to our higher-end clients with Cape Air Elite, serviced by our smaller turboprop fleet like the Beechcraft King Air or the Pilatus. This offers business-class travel at faster speeds than our standard Cape Air Flights. Flights will usually begin and terminate at the local FBO. The eligible pilots have a ranks of Captain or higher and are held to higher standards of realism and knowledge. The Approved Aircraft list contains acceptable replacement aircraft in lieu of the King Air 200 for Elite pilots.

Acceptable Replacements for B200 (Cape Air Elite)

Default King Air 350 • B350
RealAir Beechcraft Duke B60 Turbine • BE60
Carenado Beechcraft King Air C90B • BE9L
Carenado Beechcraft Super King Air 200 • BE20
Carenado TBM850 • TBM8
Carenado Cessna 441 Conquest II • C411
Flight1 Cessna 441 Conquest • C441
Flight1 Pilatus PC-12 • PC12
Flight1 Kingair • BE20
Carenado Pilatus PC-12 • PC12
Wilco Piaggio Avanti • P180
Mario Noriega Piaggio Avanti • P180
Aerosoft PA-31T2 Cheyenne IIXL • PAY2
Aerosoft Twin Otter • DHC6
Shorts S330 Air Ecosse Passenger • S330

c) Turbine, LTD.

Cape Air Virtual also operates Turbine, Ltd., available to pilots that have achieved the rank of Senior Captains and provides regional passenger service on larger turboprop aircraft like the Dash-8 and the Beechcraft 1900D. This offers pilots longer distance destinations with trips into and out of the BVA. Pilots are encouraged to fly at or below at or 10,000ft when ATC Approach services are available.

Acceptable Replacements for DH8A (Turbines Ltd.)

Cape Air Dash 8 • DH8A

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FSND Saab 340 • SF34
ATR-72 • Aerosoft • ATR2
Premier Aircraft Beechcraft 1900 C/D • B190
PMDG Jetstream 41 • JS41
Majestic Q400 Dash 8 • DH8D
Carenado Beechcraft 1900D • B190
Carenado Aero Commander • AC50

8) Installations

Cape Air Virtual requires you to install two pieces of software, both of which are free. You will need install smartCARS, our Virtual Airline Management System located [here](#), which tracks your flight and manages airline data. FSUIPC, the module that allows VAFS to communicate with your simulator will also need to be installed. You can find these downloads and more in the Pilot Center.

a) Installing FSUIPC

FSUIPC is a requirement for smartCARS to be able to log your flights. FSUIPC is offered in both freeware and payware versions; however, the free version suffices for our community's purposes. You will need to download the version for your simulator of FSUIPC4 from the [developer's website](#). After you extract the ZIP file, run the 'Install FSUIPC4' executable. When you are prompted to enter a registration for the software, click 'Cancel'.



To verify that FSUIPC is installed, visit your main simulator directory. There, you should see a folder called 'Modules' containing files related to FSUIPC.

b) Installing smartCARS

SmartCARS is a simple and straight forward install. Once you've become a CAV member, our Downloads page will provide you with a link to install. The install is a simple and straightforward installation, given that it is all automated. Setting up smartCARS is simple: Login using your credentials utilized when

applying to CAV and joining the website; search for a flight of your interest;
and you're all set to go!

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Airline Regulations & Procedures

1) smartCARS

We use smartCARS for the recording of flights and pilot hours and managing airline data. It is a standalone program that works in conjunction with FSX, X-Plane, and Prepar3D. The Pilot Center will have the download and information on how to configure this software. Each flight will end with a Pilot Report (PIREP) that your HUB manager will receive and approve.

a) PIREP Regulations

Submitting a PIREP will subject your PIREP to review. Each PIREP must follow the below guidelines or is subject to rejection by your HUB Manager and will not count be added to your pilot profile. We may submit comments regarding discrepancies prior to accepting PIREP. You may also add a comment to inform of us any discrepancies prior to to review.

- (1) Your landing rate is lower than -300fpm;
- (2) You have successfully completed the flight (both engines shut down) and flaps retracted.;
- (3) The use of excessive movements is not present through your log;
- (4) Speed limit--250 knots (MAXIMUM) at or below 10,000 MSL;
- (5) Flight terminates at correct destination airport unless diverted due to weather, mechanical issue, or emergency reasons.

2) General Regulations

We enforce these general regulations to ensure all operations remain running smoothly between our pilots and Administration Team. These are enforced on all of our pilots and administrators, as well.

- 1) All Cape Air Virtual pilots must remain a member in good standing of Boston Virtual ARTCC (BVA). Membership to Cape Air Virtual is not permitted unless you are a member of BVA.
- 2) Cape Air Virtual pilots will abide by VATSIM's Code of Conduct and BVA's Member Expectations.
- 3) No particular number of flights is required of any pilot in a given amount of time. However, pilots are expected to fly regularly because they want to have fun and the more "Care" callsigns over the frequency the better!!
- 4) Though not required, pilots are strongly encouraged to records their flights using the SmartCARS software. This is free to Cape Air Virtual pilots and offers many features, options, and a streaming radio station from JetStream Radio! Flights must be logged in order to be considered for promotions.
- 5) Cape Air Virtual pilots are strongly encouraged to fly with ATC, therefore it is not required to start a new flight at the airport they last flew to; starting from a

location other than your last destination is discouraged unless your new starting location has ATC coverage available.

- 6) Cape Air Virtual pilots are expected to make our presence known during BVA events and other sponsored events. For events, such as BVA's Regional Circuit, the corresponding routes are added to smartCARS, allowing pilots to log hours for Cape Air Virtual under a charter route. If an event is taking place, it is strongly encouraged to fly the available routes for the event, starting and ending at one of the featured airports.

3) **Flying in the Session**

When flying in the session, pilots are expected to uphold Cape Air Virtual's Expectations, Rules & Regulations, and VATSIM's Code of Conduct. Disciplinary actions will be taken if any pilot is reported not following any of these regulations and/or is action out of term in regards to member expectations. Below you will find Cape Air Virtual's Expectations for when flying online:

- 1) All flights for Cape Air Virtual must take place on the VATSIM network under real-world weather conditions. Any flights flown offline are subject to deletion by the Administration.
- 2) Flights for Cape Air Virtual must be flown in aircraft from the Approved Aircraft List found on pages 6 and 7 of this handbook. Suggestions for additional substitute aircraft are welcomed.
- 3) Cape Air Virtual flights in the C402 or similar may fly either IFR or VFR or a combination of both.. Pilots are required to request Flight Following whenever flying VFR with available ATC coverage. Elite and Turbine, Ltd must be flown IFR.
- 4) All Cape Air Virtual flights use the identifier 'KAP'. The correct pronunciation of a Cape Air Virtual flight is 'Care'. (i.e. the correct identifier for Cape Air Virtual flight 225 is KAP225, and should be pronounced to ATC as 'Care 225').
- 5) When flying outside of ZBW ARTCC airspace, you must include correct pronunciation of the KAP callsign in your 'Comments' section of your flight plan. (i.e. Callsign: "Care").
- 6) At the Boston Logan Airport (KBOS), Cape Air Virtual aircraft park at the real-world Cape Air ramp, located at the Charlie Terminal (Gates C271-C275). Under no circumstances should a Cape Air Virtual pilot park at the general aviation ramp unless flying for Elite on an Elite route. The Pilot Center has a working list of parking locations for our fleet.

- 7) Cape Air Virtual has a Letter of Agreement (LOA) with the ZBW ARTCC allowing for the use of Coded Routes (VFR and IFR) at many of our airports. All pilots should be familiar with the [Cape Air Virtual Coded Routes](#). Pilots or controllers may initiate a clearance using a coded route.
- 8) Pilots are encouraged to file their flight plans and use the flight number of the flight for that route. For group flights, the Pilot ID is to be used.
- 9) Cape Air Virtual pilots are not only skilled aviators, there are also social beings. A Cape Air Virtual Office is open in Teamspeak with several rooms available to only our pilots. Whenever in flight, pilots should be in the ‘Company Frequency’ or ‘Shared Cockpit’ rooms. Seek an Administrator to receive your ‘CAV Pilot’ rank on TeamSpeak.

a) **Flight Planning**

When flying in the session, Cape Air Virtual pilots are always encouraged to fly the most up-to-date flight plans. Our Coded Routes document provides the current, updated flight plans utilized by Cape Air pilots departing and arriving into KBOS. When flying between other destinations, many of the updated routes are included in our scheduling system. Meaning, once you open up the flight in smartCARS you can find the suggested route in the ‘Route’ section of your briefing.

i) **IFR Flights**

For every IFR flight, a flight plan should be filed. When flying IFR you are expected to follow all of the rules and procedures for IFR flight. You should always be in contact with ATC where available.

ii) **VFR Flights**

When flying VFR, filing a flight plan is also mandatory under CAV regulations. We encourage our pilots to ensure ATC knows where and how you will be reaching your destination. VFR does not require you to fly a specified route. You should contact ATC where appropriate.

4) **Disciplinary Actions**

With regards to BVA’s Member Expectations and VATSIM’s Code of Conduct any pilot, regardless of rank, is subject to the loss of the privilege to fly for Cape Air Virtual. Any discipline problems will be reported to the Cape Air Virtual Administration and if necessary, BVA Administration. If the Administration determines disciplinary action is warranted, a disciplinary meeting will be called amongst the Administrators, in which a final decision will be reached (the President/CEO has all final decisions in these meetings). Disciplinary action may include, but is not limited to,

dismissal from the airline and or BVA, probation, mandatory or remedial training, and/or loss of rank. Suspension from the BVA or VATSIM communities results in CAV airline suspension.