Boston Virtual ARTCC

Airspace Briefing Guide

March 14, 2022

Purpose

This Airspace Briefing Guide (ABG) is designed to provide pilots flying in the Boston Virtual ARTCC airspace (ZBW) with recommended practices from pilots and air traffic controllers to make their flight experience as realistic as possible.

About Boston Virtual ARTCC

Boston Virtual ARTCC (BVA) is a community within VATSIM's global network of pilots and controllers. We provide air traffic control within the Boston ARTCC on VATSIM. We also encourage pilot members to join the ARTCC—no training required—and take advantage of exclusive scenery updates, training programs, and one of the most active and realistic aviation communities. For more information about BVA, visit www.bvartcc.com.

Scenery Updates

Pilots may find that the 'default' airports in common flight simulation platforms do not always match available charts. As controllers issue instructions based on current publications, pilots should install up-to-date scenery for the airports they operate at.

For KBOS:

FSX or Earlier		MSFS	X-Plane
Freeware	Payware	Freeware	Freeware

Prepar3D				
v3 or earlier		v4		v5
Freeware	Payware	Freeware	Payware	Not Required Payware option from FlyTampa

For other airports in our airspace:

- Search for freeware options on AVSIM (FSX/P3D), FlightSim.to (MSFS), or X-Plane.org (X-Plane), or use a payware add-on.
- MSFS pilots may wish to consider JustFlight's Real Taxiways add-on, which corrects taxiway signage and placement for thousands of airports with a single purchase.

For more information, visit the Airport Scenery Guide on Flight Simulation Association.

Expected ATC Coverage

Looking to see when ATC will be online? You can get an idea of expected coverage on the homepage of our website. Though subject to change, the schedule can provide pilots with a good idea of when and where to expect coverage within our airspace.

Generally, we see the most activities during weekday evenings (U.S. Eastern Time) and throughout the day on weekends.

BVA members can also subscribe to ATC/airspace notifications via Discord.

General Recommendations

When you're flying anywhere in our airspace (or, for that matter, on VATSIM), please keep the following recommendations in mind:

- **Only accept what you can perform.** If you are assigned a procedure or clearance you don't understand, speak up! We would rather provide vectors (headings and altitudes) than see an aircraft fly a procedure incorrectly.
- **Ask questions.** If you are unclear about an instruction or just want more information, ask.
- **Don't pause or leave the flight deck** without asking for permission. It's best to ask via frequency (by voice or, if impossible, by text) rather than private message.
- **Have updated navigation capability**, if you can. Controllers expect you to have the latest capability. Click here for more information about getting updated info.
- **Ensure you have appropriate charts** and know how to interpret them. Information about finding charts is available on our website. If you aren't sure about something, ask!
- **Know who to call.** Just like most facilities, we provide 'top-down' coverage, meaning that if a position is unstaffed, you call the next 'higher' position. Operating hours are not simulated; if a controller is online, any underlying facility is staffed. More information.
- **Call early.** If you are entering our airspace when adjacent facilities are offline, keep an eye on VATSpy, Vattastic, and other network monitoring apps. When entering from uncontrolled/offline airspace, call us 20-50 miles *prior* to reaching online airspace.
- **Listen for frequency changes.** If instructed to "monitor" the next controller, change to the new frequency but wait for the controller to call you. Only call in to a new frequency when you have been instructed to "contact".
- **Don't over-report.** Reporting "established on the localizer", at cruise, or over waypoints is not required in the U.S., unless requested by ATC.
- **Check out the Pilot References section** of our website to find preferred routes, proper aircraft types, correct equipment suffixes, and more.

Wings Over New England

Members of Boston Virtual ARTCC are eligible to participate in Wings Over New England (WINGS), an initiative designed to provide a voluntary training and testing program for community members. Through a series of challenge flights, the WINGS program helps teach safe and efficient aircraft operation within the air traffic control system.

You may hear members completing WINGS flights while operating inside our ARTCC.

Boston Airport (KBOS) Operations

Boston Logan International Airport (KBOS) is the busiest airport in our airspace. If you plan to operate to or from KBOS, there are a few pieces of information you should know.

Clearance Delivery via Controller-Pilot Datalink Communications (CPDLC)

Pilots can anticipate receiving a clearance through CPDLC. The clearance may include route amendments. CPDLC clearances are accomplished via private message from ATC. The CPDLC message will contain information about the cleared/approved route and altitude, any altitude restrictions, and the departure frequency and squawk code. It also includes instructions on which controller to contact and what information to provide on initial call.

Pilots can anticipate receiving clearance via CPDLC immediately after filing a flight plan. Pilots may not have called to request clearance before receiving the CPDLC message.

When cleared via CPDLC, pilots must specify the following information on their initial call:

- Location on the airport (gate or parking spot).
- The current ATIS code.

Pilots who are not able to accept clearance via CPDLC should disregard the message and request a voice clearance. Similarly, pilots who have not received clearance via CPDLC should call the appropriate controller for clearance.

When receiving a clearance (either via CPDLC or voice), the phrase "climb via SID" may be used. This phrase indicates that the top altitude pilots are told to expect on the SID applies on departure. At KBOS, all jet aircraft have a top altitude of 5,000', while all non-jet aircraft have a top altitude of 3,000'. When instructed to "climb via SID", either via voice clearance or CPDLC, ensure to stop your initial climb at the appropriate top altitude for your aircraft type unless you are cleared higher by ATC.

RNAV Departures

Flight crews of jet aircraft are encouraged to include the appropriate RNAV Standard Instrument Departure Procedure in the IFR Flight Plans that they file. RNAV SIDs should be used for any KBOS jet departure with a final altitude at or above 11,000'. If a SID is not filed, pilots can expect ATC to assign the relevant RNAV SID unless the pilot specifically states an inability to comply.

The phrase "climb via SID" will be used on all RNAV departures. This phrase instructs aircraft to stop the initial climb at the SID top altitude (5,000') until receiving further instruction from ATC.

RNAV Arrivals and "Descend Via" Clearances

Boston ARTCC will issue "descend via" clearances to properly-equipped RNAV aircraft inbound to the Boston Terminal Area on the ROBUC, OOSHN, JFUND, ZELKA, and ROZZE STAR procedures.

Pilots are expected not to begin the vertical descent portions of any of the STARs until instructed to "descend via." Speeds must be complied with unless otherwise specified by ATC. Ensure your aircraft is programmed with the correct route (waypoints) associated with the assigned runway.

When you check in on a new frequency while "descending via", you must state the arrival and runway (if any) when you check in:

> *Example: "Boston Approach, DAL2363, 17,500, descending via the ROBUC3 arrival, Runway 27, with information Kilo."*

Pilots unable to comply with an RNAV STAR and/or a "descend via" clearance should not accept the clearance and request headings and altitudes from ATC.

Parking and Ground Operations

There are four terminals at KBOS: A (main and satellite), B, C, and E. US Customs is in Terminal E; all international arrivals, except those from preclearance airports, will use Terminal E. Most international departures from domestic carriers depart from Terminals A, B, and C.

Boston ARTCC provides control over movement areas, including all taxiways, runways, and areas surrounding Terminals B, C, and E. All aircraft are requested to advise ATC prior to pushback.

A specific clearance is required to cross each runway you come to (active or inactive). Always hold short of a runway unless you have received a crossing instruction. If you are unsure, ask!

The diagram below shows gate layouts and common airline parking locations. You can also find an interactive map of terminals and gates on the Logan Airport website.

Terminal E
International
- Frontier
- Sun Country
- Air France
- British Airways
- Emirates
- Icelandair
- KLM
- Porter
- Virgin Atlantic
- All int'l arrivals

Terminal C
- Aer Lingus
- Cape Air
- JetBlue
- TAP Air Portugal

Terminal B
- Air Canada
- Alaska
- American
- Southwest
- Spirit
- United

Terminal A
- Delta Air Lines
- WestJet

Checklist for Flying in ZBW

The checklist below has been developed based on best practices identified by ATC and pilots. While flying in our airspace, please keep the following important points in mind:

1. Download a scenery update for KBOS and other airports you plan to fly to (see the **Scenery Updates** section for our recommendations).

2. Update your GPS/navigation data and advise ATC of procedures you are unable to accept.

3. File a preferred route. Note that most of the RNAV procedures in and out of KBOS are only available for turbojet aircraft.

4. Have the appropriate charts for your flight.

5. Use the frequency, not private messages, when you need to communicate with ATC. Controllers always respond to frequencies before private messages.

6. Ask questions if you are unclear of, unsure of, or unable to accept a procedure. Requesting help and getting headings and altitudes is strongly preferred over guessing at what to do.

7. Use voice, whenever you can. We love voice pilots and would prefer to work with you on voice rather than text, even if it means slowing down or simplifying instructions. The experience is more realistic when you're using voice. (If you don't have a microphone, consider "receive only" so you listen to the controller's instructions and reply via text.)

8. Determine which frequency to contact, and call in. If you aren't sure, ask any controller (via frequency) and you'll be pointed in the right direction.

9. Know the coverage area we serve. We do not provide ATC coverage in Canada or local coverage for the New York City airports (KJFK/KEWR/KLGA), although Boston Center does overly a large portion of New York State. Many of the STARs into KEWR, KLGA, and KJFK route through Boston Center airspace.

Feedback

The controllers and staff of Boston Virtual ARTCC thank you for flying with us. We hope you enjoy your experience, and hope to see you in our airspace again soon. We love feedback! Please tell us about positive experiences or anything you'd like us to improve.