Boston Virtual ARTCC

Letter to Airmen

Version K
October 11, 2019

Purpose

This Letter to Airmen (LTA) is designed to provide pilots flying in the Boston Virtual ARTCC airspace (ZBW ARTCC) 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 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

Many of the airports in ZBW, especially Boston Airport (KBOS), have been substantially modified since the original release of many common flight simulation platforms. Controllers will issue instructions on the basis of current charts and publications. Pilots with outdated airports that do not match current publications are expected to advise ATC prior to requesting taxi instructions, even if that information is filed in their flight plan.

> *Example: "Boston Ground, DAL2363, ready to taxi, outdated scenery."*

BVA offers a free scenery package for several of our airports, including KBOS. If you are a member, visit BVA's Downloads page to access the scenery.

For non-members, an excellent payware scenery for KBOS is available from FlyTampa for FSX and P3D. For all other pilots, please download and install a freeware update:

- FSX, Prepar3D v3, or an earlier version of Prepar3D (courtesy of Ray Smith)
- Prepar3D v4 (courtesy of Robert Catherall)
- X-Plane

Members of the community have access to free scenery updates we have developed for KBOS as well as other popular airports within our airspace.

ATC Timetable

Looking to see when ATC will be online? Some of our controllers post their availability on our ATC Timetable. The schedule is subject to change, but can provide pilots with a good idea of when and where to expect coverage within our ARTCC.

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

General Recommendations

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

- **Only accept what you can perform.** If you are assigned a SID, procedure, or clearance that you don't understand or don't know you can do, speak up. It's much easier for the controllers to give alternative instructions before a mistake is made. We would rather provide headings and altitudes than have a pilot accidentally turn the wrong way or overfly a noise sensitive area.
- **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 first. 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. More information about finding charts is available on our website. If you aren't sure about something you see on a chart, 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. For more information on figuring out who to call, click here.
- **Call early.** If you are entering our airspace when adjacent ARTCCs are offline, keep an eye on VATSpy, Vattastic, and other tools to see when you're approaching airspace. If you are inbound from UNICOM, aim to call Boston Center between 20-50 miles *prior* to reaching the ARTCC boundary.
- **Check out the Pilot References section** of our website to find preferred routes, proper aircraft types, correct equipment suffixes, and more.
- **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".
- **Go direct when cleared "direct".** If ATC instructs you to "proceed direct" to a waypoint, the controller expects you to proceed from your current position directly to the new waypoint. If you aren't able to go direct and instead need to turn back to the "magenta line" on your GPS, make this request with the controller.

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 clearance 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 it.

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

- Location on the airport (gate or parking spot)
- Assigned departure procedure or SID
- 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 ready to copy.

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 with the SID, or has filed a non-RNAV equipment suffix.

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 advised by a Boston ARTCC controller to "Descend Via." Speeds are expected to be complied with unless otherwise specified by the controller at Boston ARTCC.

Remember:

1. You are not cleared for the vertical profile until issued a “descend via” clearance.
2. You cannot climb to a higher altitude when issued “descend via” clearance.
3. If you were issued a speed to maintain and are later issued a “descend via” clearance, all published speeds become mandatory unless the controller specifically assigns a speed after the “descend via” clearance is issued.
4. If you are vectored off the arrival you will be given an altitude to maintain. When you are "re-cleared" on the arrival, a clearance to join the arrival only gives you lateral clearance. You will be issued a new "descend via" clearance to rejoin the vertical profile.
5. Minimum Enroute Altitudes (MEAs) are not part of the vertical profile. An MEA is based on obstruction clearance and DME NAVAID reception. They are not ATC procedure restrictions. Coded restrictions are depicted at the fix/NAVAID or waypoint, and are part of the vertical profile.
6. When you check in on a new frequency while “descending via”, you are required to state the arrival and runway (if any) when you check in:

   Example: “Boston Approach, DAL2363, 17,500, descending via the ROBUC2 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

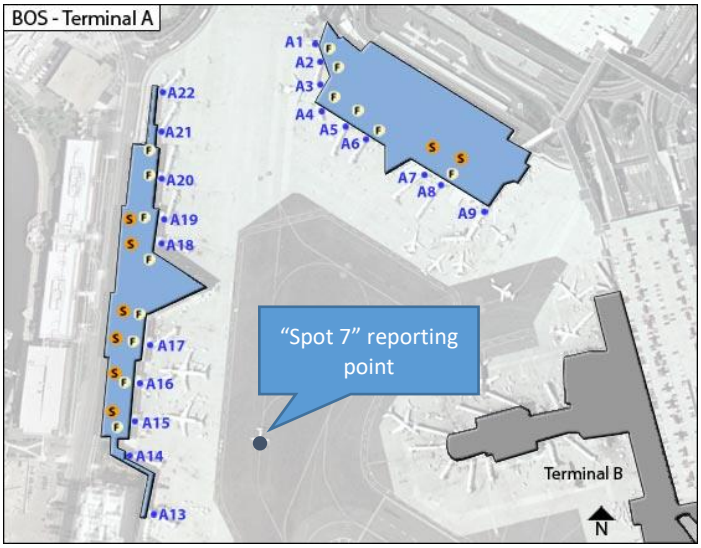
There are four terminals at KBOS: A (consisting of a main and satellite terminal), B, C, and E. Terminal E is the only terminal with customs processing and any international arrivals, including from domestic carriers, park at Terminal E. Many international departures will originate from terminals A, B, and C.

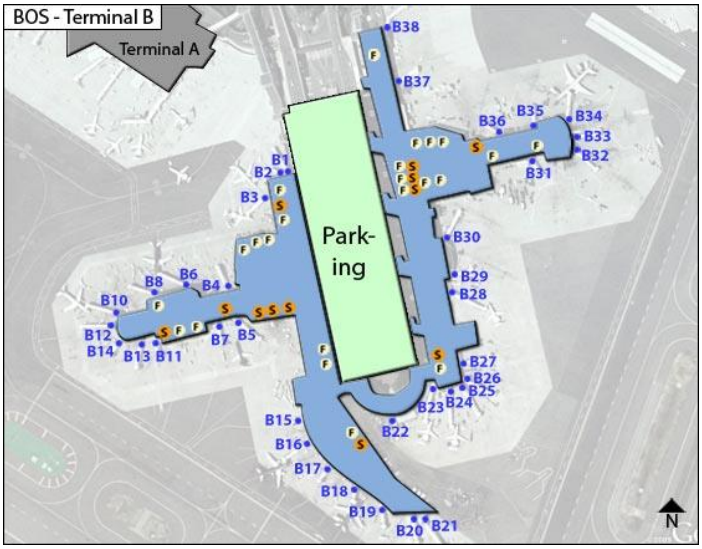
At KBOS, Boston ARTCC provides control over movement areas, including all taxiways, runways, and many areas surrounding Terminals B, C, and E. For that reason, all aircraft are requested to advise the controller when ready to push, unless otherwise instructed. The ramp at Terminal A is managed by Delta Airlines and control over this area is generally not simulated.

Remember, you need a specific clearance 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!

As mentioned, the taxiway and airport layout changed substantially at KBOS in 2010. However, controllers issue taxi instructions on the basis of current publications. If you don't have updated scenery, advise the controller prior to requesting taxi instructions. A comparison of the changes is available at the end of this document.

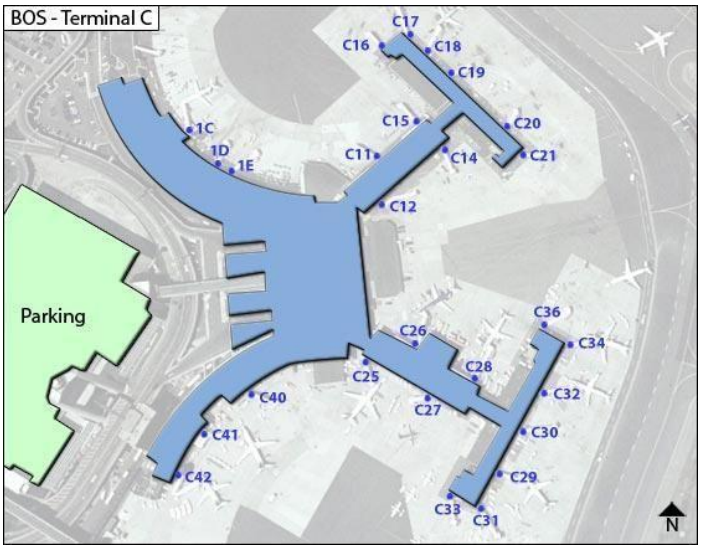
The diagrams on the following page show the gate layouts and common airline parking spots. You can also find an [interactive map of terminals and gates on the Logan Airport website].

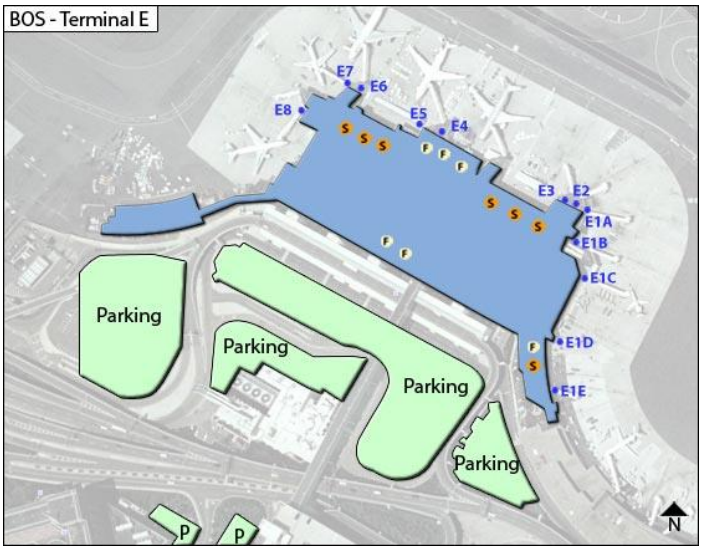




Terminal A normally serves Delta Air Lines and WestJet.

Terminal B normally serves Air Canada, American, Southwest, Spirit, and United.





Terminal C normally serves Aer Lingus, Alaska, Cape Air, JetBlue, Silver, Sun Country, and TAP Air Portugal departures.

Terminal E normally serves all international arrivals and several international departures. International arrivals from American, Delta, and JetBlue park at Terminal E. All international airline arrivals not mentioned above, including Aer Lingus, Air France, Alitalia, British Airways, Porter, and Virgin Atlantic park at this terminal. However, most international departures from domestic carriers such as American, Delta, JetBlue leave from Terminals A – C.

Pilot Ratings Program

Members of Boston Virtual ARTCC are eligible to participate in the Pilot Ratings Program, an initiative designed to provide a voluntary training and testing program for community members. The Pilot Ratings Program is also a VATSIM Authorized Training Organization (ATO). During the completion of the PRP, members are eligible to receive the P3, P4, and P5 VATSIM pilot ratings. You may hear members attempting PRP flights inside our ARTCC.

Using X-Plane on the Network

If you use X-Plane on the network, a potential issue can arise due to the design of the program. If you start to experience an FPS below about 20, X-Plane automatically "slows you down" in order to keep the visual performance "smooth". However, when this happens, your simulator rate actually reduces, which can make it will be challenging for ATC to sequence you with other traffic.

To prevent this issue, we recommend all X-Plane users download and install this plug-in before flying on the network. The plug-in will automatically adjust your simulation rate to ensure you keep up with the 1x simulation rate used by FSX and Prepar3D users.

Checklist for Flying in ZBW

The checklist below has been developed based on mistakes commonly noted by our controllers. Before or while flying in our ARTCC, please keep the following important points in mind:

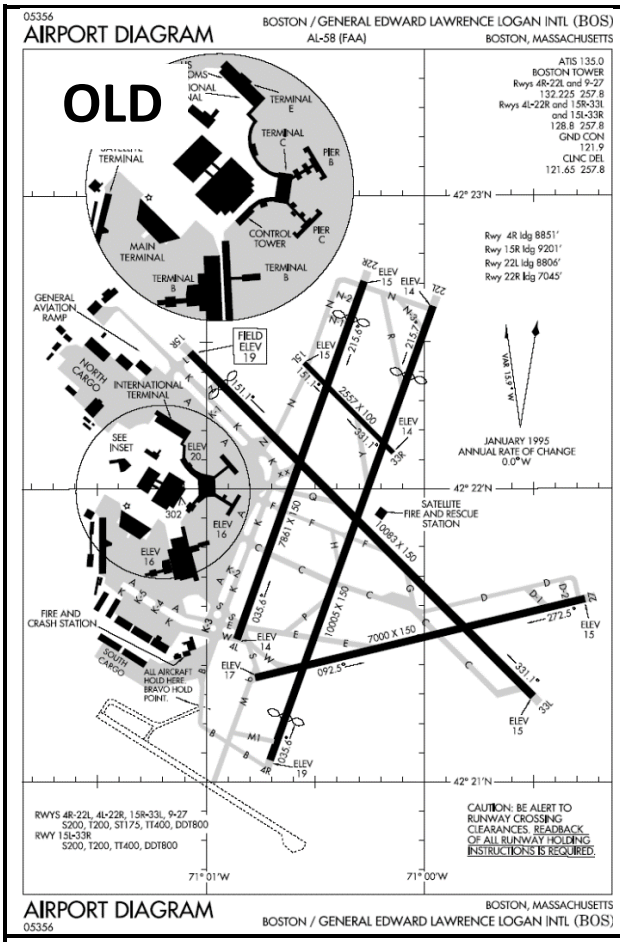
1. Download a scenery update for KBOS: FlyTampa, Freeware by Ray Smith (FSX and P3D v3, P3D v4), BVA Member Scenery (members only)
2. Update your GPS or navigation data (if possible); if not, ensure to reference that you are using outdated information and file an appropriate Equipment Suffix
3. File a preferred route, if established. 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. If you use X-Plane, have this plug-in installed.
6. Use the frequency, not private messages, when you need to communicate with controllers. Controllers always respond to frequencies before private messages.
7. 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 flying runway heading and hoping for the best.
8. 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. While text pilots are welcome too, the experience is substantially more realistic and immersive when you're using voice. (If you don't have a microphone, listening for instructions and responding via text can be very helpful to controllers when it's busy on frequency.)
9. 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.
10. 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

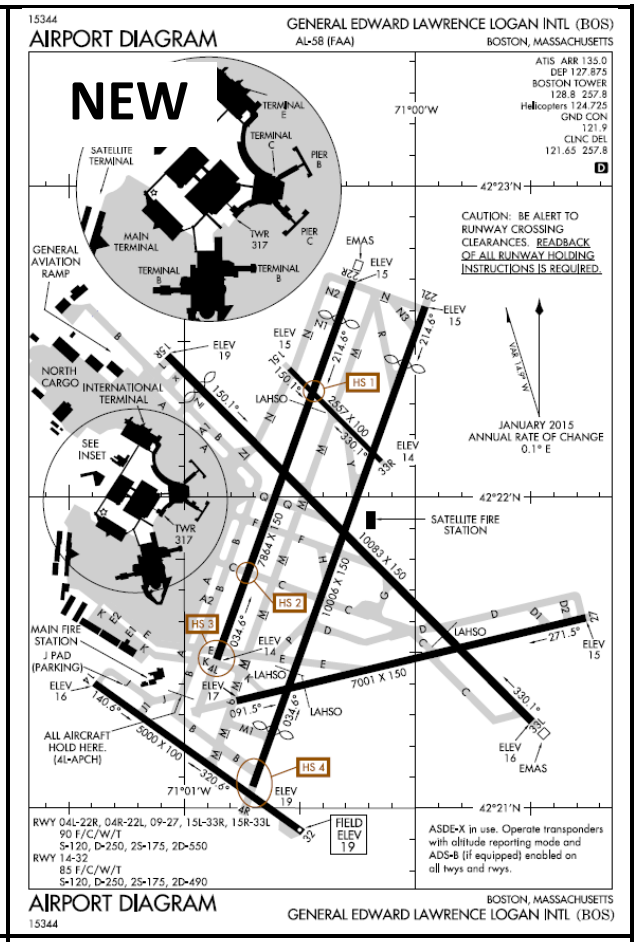
The controllers and staff of Boston Virtual ARTCC thank you for flying with us. We hope you enjoy your experience, and hope to see you in our airspace again soon. We love feedback! Please tell us about positive experiences or anything you'd like us to improve upon using the Feedback page of our website.

Appendix A: Boston Airport (KBOS) Taxiway Layout

Over the past few years (and definitely since FS9 and FSX came out), there have been several changes/updates to the taxiway layout at KBOS. Ground control service consistent with the new/current/real taxiway system will be provided unless the pilot specifically advises the controller that he/she has a preference for the old taxiway system.



2006 Airport Layout (Old Diagram)



2016 Airport Layout (Current Diagram)