

FOREWORD

The provisions of this Directive are supplemental to procedures and phraseology prescribed in FAAH 7110.65, Air Traffic Control, and FAAH 7210.3, Facility Operation and Administration. It prescribes air traffic control procedures and responsibilities for use by personnel assigned to the Boston ATCT. Controllers are required to be familiar with the provisions of this Directive that pertain to their operational responsibilities and to exercise their best judgment if they encounter situations not covered by it.

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CHAPTER 1. GENERAL

1-1. PURPOSE. To define duties and responsibilities, depict areas of airspace allocated to each position and provide supplemental direction as necessary for each position of operation within Boston ATCT.

1-2. DISTRIBUTION. This Directive is distributed to Boston Tower Binders, Air Traffic Manager, Operations Manager, and Support Manager.

1-3. CANCELLATION. Boston Tower Order 7110.11H, Boston ATCT Standard Operating Procedures, dated February 1, 2002, is cancelled.

1-4. EFFECTIVE DATE. February 22, 2004.

1-5. BACKGROUND. The Standard Operating Procedure document must, at a minimum, include the jurisdictional boundaries for each operational position/sector and the required procedures for maintaining a safe and efficient operation. The directives at this facility have addressed operational issues in many separate documents. These operational subjects are better addressed in one cohesive and accessible document and have been combined into this Standard Operating Procedures Directive.

CHAPTER 2. AIRSPACE DELEGATION

2-1. GENERAL. This chapter defines delegated airspace for utilizing Tower assigned airspace. Above 2,000' MSL in the Boston Class B Airspace has been delegated to Boston Consolidated TRACON (A90).

2-2. TOWER AIRSPACE (BOS).

a. General. 2,000' MSL and below from the Boston VORTAC to the 8 DME, except 1,000' MSL and below, underlying Final Vector airspace from the Final Approach Fix to the 8 DME, as depicted in Appendix 2.

b. Local Helicopter (LH) Airspace.

(1) That airspace, within Tower Airspace, at and below 1,000' MSL, except where otherwise defined, west of a line beginning at the Route 3 and I-93 Interchange at Braintree; thence running northbound paralleling the Quarry Route to Andrew Square; thence direct to South Station; thence direct to the southwest corner of Bird Island Flat; thence direct Boston ATCT; thence along the northside airport access road direct to the south pier of the Tobin Bridge; thence paralleling the Tobin Route to the Boston VORTAC 4 DME; thence on a line direct to the Route 1 and I-95 Interchange ending at the Boston VORTAC 8 DME.

(2) Local Helicopter Airspace is further subdivided into 3 subsets and shall be referred to as Local Helicopter (LH) Area "A", Area "B", Area "C".

(a) Area "A" - 1,000' MSL and below.

(b) Area "B" - 700' MSL and below (1,000' MSL and below on Turnpike and Hampshire Routes).

(c) Area "C" - 1,000' MSL and below (1,500' MSL and below on Turnpike and Hampshire Routes).

c. Local Control (LCE/LCW) Airspace.

(1) That airspace within Tower Airspace, excluding Local Helicopter Airspace.

(2) When dual local controllers are utilized, Tower Airspace is divided into 2 areas of jurisdiction.

(a) 4/9 and 4/4 Configurations. On the north side of the airport, the airspace boundary line starts at a point on the northeast boundary of the airfield (between Runways 4L and 4R), thence along a 036° bearing to a point 1/2 mile northeast of the airport, thence along a 025° bearing, as depicted in Appendix B, and on the STARS Maps. On the south side of the airport, a line that extends between the final approach courses of Runways 4R and 4L (a 036° bearing) delineates the Area of Jurisdiction for each Local Controller.

(b) 27/22 and 22/22 Configurations. On the south side of the airport, the airspace boundary line starts at the BOS VORTAC and proceeds southeastbound along the BOS 130° radial, as depicted in Appendix B, and on the STARS Maps. On the northeast side of the airport, a line that extends between the final approach courses of Runways 22L and 22R (a 216° bearing) delineates the Area of Jurisdiction for each Local Controller.

2-3. TOWER WITH RADAR - LIMITATIONS. Boston ATCT (BOS) is designated as a Tower with Radar and is restricted to the following radar services/procedures within Tower Delegated Airspace:

- a. Separation between successive departures.
- b. Separation between successive arrivals.
- c. Separation between arrivals and departures.
- d. Separation between overflights and departures.
- e. Separation between overflights and arrivals.
- f. Separation between overflights.
- g. Issuance of radar vectors.
- h. Visual Approach Clearances.
- i. Utilization of Visual Separation as appropriate.

2-4.-2-99. RESERVED

3-1. AIRSPACE USAGE - GENERAL.

a. Reduced Separation on Final.

(1) Separation between aircraft may be reduced to 2.5 NM in-trail separation on the final approach course (within 10 NMs of the runway) for the following runways: Rwy 27, Rwy 4R, Rwy 33L, Rwy 15R, Rwy 22L.

(2) The reduced separation that is allowed above does not waive/reduce the minimum separation that is required by wake turbulence rules/minima.

NOTE - The reduced separation above is allowed because a Runway Occupancy Time (ROT) of 50 seconds or less has been documented for the runways noted.

b. Transfer of STARS Information.

(1) STARS Tower Display Workstation (TDW).

(a) Local Control shall utilize the STARS Modify and Quick-Look functions for the transfer of radar identification from A90 for all aircraft landing at Logan International Airport or entering the Tower's airspace. Transfer of control shall be when the aircraft enters the Tower's lateral or vertical airspace limits. These transfer procedures shall apply whenever the TDW is operational.

(b) Local Control shall notify the A90 Arrival Controller(s) and OSC/CIC whenever the TDW is unsuitable for Transfer of Radar Identification via STARS Quick-Look functions.

(2) A90 STARS.

(a) BOS arrivals landing the primary arrival runway will be transferred to the Tower on the "F" position symbol or the appropriate symbol for the position having final vector responsibility.

(b) BOS arrivals landing the secondary arrival runway will be transferred to the Tower on the "I" position symbol. When Final Vector 2 is not responsible for the secondary arrival runway the "X" position symbol shall be utilized.

(c) Arrival aircraft executing Visual Approaches (VAPS) will be modified to display "VA" in the Scratch Pad field of the Full Data Block (FDB), except for Runways 22R, 4L, 15L, 33R and 9, which are always visuals.

c. Departures.

(1) A90 shall be responsible to determine that automatic acquisition of a departure track has occurred and that all information in the FDB is correct using the Strip Bay Cameras.

(2) If the Strip Bay Camera presentation is not useable by A90, Boston Tower shall request releases for departure aircraft. The request shall include: aircraft call sign, type aircraft, departure exit fix and altitude, and departure runway.

d. Quick-Look Requirements. These Quick-Look requirements are considered the minimum to meet operational needs.

(1) Local Control West (LCW): G (LCE), F, I, and X position symbol(s) or those positions to which they are combined.

(2) Local Control East (LCE): T (LCW), F, I, and X position symbol(s) or those positions to which they are combined.

(3) Local Helicopter (LH): T and G position symbols.

e. Automation Requirements.

(1) STARS Data Entries.

(a) ATIS/GSI/Traffic Count/Altimeter entries.

1 The OSC/CIC has the overall responsibility to ensure the currency of the ATIS Alpha Character, General System Information, System Altimeter, and to ensure that the Instrument Approach Traffic Count entry is enabled/disabled as appropriate.

2 The Flight Data position controller is responsible for entering the information in Paragraph e(1)(a)1 above.

3 The Instrument Approach Traffic Count Entry shall be enabled whenever the visibility is less than 3 miles, or, when the ceiling is at/below 3000 feet.

*NOTE - The entry is: <MULTI FUNC> 2 C BOS <space> E (to enable)
I (to Inhibit) <ENTER>*

(b) Scratch Pad("Y")/Type-Field("H") (fields 2 and 4) Usage.

1 Departure/Overflight/VFR through-flight tracks shall contain a single alpha character exit fix and requested altitude (RAL) expressed in hundreds of feet in the Scratch Pad field (field 2/"Y"). RAL information is obtained from the interfacility flight plan message or entered by the appropriate controller manually through the STARS keyboard. All IFR and VFR departure tracks shall include this information. Altitude amendments received via FDIO must be entered manually. Aircraft type or other operationally significant data (i.e., FOTO, FISH, etc.) shall be placed in the Type field (field 4/"H"). Overflight and VFR through-flight destination airport shall also be placed in field 4("H").

2 Scratch Pad/Type information shall be entered at the earliest possible time.

(c) Mode C Filter Limits.

1 Set the upper altitude filter limits (unassociated and associated tracks) no lower than 1,000' above the highest altitude for which the controller is responsible.

2 This requirement may be suspended only when clutter is excessive.

f. STARS ESL OPERATION.

(a) Boston Tower shall:

- code.
- 1 Issue departing aircraft the Boston ARTCC assigned discrete beacon code.
 - 2 Coordinate with A90 for releases of departure aircraft.
 - 3 Input Departure Messages (DM) into the FDIO.

(b) A90 shall provide Boston Tower with the arrival sequence. Coordination shall at a minimum include the ACID, Discrete Beacon Code, Aircraft Type, and landing runway.

3-2. TOWER AIRSPACE USAGE.

- a. General. Local Helicopter (LH) Airspace is designated for VFR/SVFR operations only.
- b. Procedures.

(1) Jurisdiction of Area "A" shall revert to Local Control when Runway 15R VAP 4L procedure is in use, or when Runway 9 is being utilized for arriving aircraft.

(2) Local Helicopter (LH) traffic shall be assigned an altitude within the approved altitudes for Areas "A", "B", or "C", except:

(a) 500' MSL and below in Area "B" whenever the Runway 15R VAP 4L/22R procedure is in use, except helicopters arriving/departing the BOS Helipad along the Hampshire and Turnpike Routes 1,000' MSL and below when Area "A" is released to Local Helicopter (LH).

(b) beneath Final Vector airspace, between the 5 NM range mark and the 8 DME, an altitude no higher than 1,000' MSL.

(c) Turnpike and Hampshire Routes 1,000' MSL and below in Area "C" whenever fixed-wing departures are being conducted from Runways 33L or 27; or arrivals are being conducted to Runways 9, 15R, 15L; or the Runway 15R VAP 4L/22R procedure is in use.

3-3. TOWER POSITION RESPONSIBILITIES.

a. Local Control East/West (LCE/LCW). LCE/LCW is responsible for the arrival and departure of aircraft on assigned runways (except as otherwise provided in this directive) and aircraft/helicopters operating within assigned airspace. Local Control East/West shall:

(1) Confine missed approaches/go-arounds within assigned airspace, coordinate with the other Local Controller in a timely fashion, and to the extent practicable handle the missed approach/go-around as a departing aircraft, assign 3,000' MSL, and coordinate with ID prior to transfer of communications. Whenever possible, jet aircraft shall follow departure route noise abatement profiles.

(2) Coordinate aircraft circling/transitioning to a runway under the jurisdiction of the other in a timely fashion. When required, communication transfer shall take place after coordination/approval action has been taken.

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(4) Obtain an acknowledgment of a hold-short instruction prior to transferring communication of the aircraft to the other Local Controller.

(5) Inform the other Local Controller of traffic or circumstances which will or may affect the other, in a timely fashion.

(6) Maintain an awareness of the other Local Controller's traffic.

(7) Ensure that the IDS5 Monitor at the LCE Position, and, one of the IDS5 Monitors at the LCW Position, is utilizing a Profile that has TDWR Alerts on/enabled.

b. Local Helicopter (LH). LH is responsible for the arrival and departure of helicopters to/from BOS and for other aircraft/helicopters operating within assigned airspace. Local Helicopter (LH) shall:

(1) Provide visual separation between Runway 27 departures and helicopter traffic east of the Coast Guard Station.

(2) Advise Local Control when visual separation is being provided between helicopters and fixed-wing traffic.

(3) Ensure that helicopters maintain at or below 300' MSL between Andrew Square and the Runway 4R Outer Marker when landings are being conducted to Runways 4L/R.

NOTE - Altitudes higher than 300' MSL may be utilized between Andrew Square and the Runway 4R Outer Marker provided approved separation is being applied.

(4) Prior to issuing the altitude restriction in b(3), ask all helicopters that are not signatory to a Boston Tower Class B Airspace Letter of Agreement if they are able to maintain VFR/SVFR at/below 300' MSL between Andrew Square and the Runway 4R Outer Marker.

(5) Coordinate landing sites (runways or taxiways) for helicopters with the appropriate Local Controller(s) and/or Ground Controller(s).

c. Ground Control (GC1 and GC2).

(1) GC is responsible for taxiing aircraft and vehicular traffic on movement areas that do not require the crossing of active runways.

(2) GC shall obtain an acknowledgment of a hold-short instruction prior to transferring communication of the aircraft to the LCE/LCW controller.

d. Boston Gate (BG). Boston Gate is responsible for the efficient metering of outbound aircraft. Boston Gate shall:

(1) Maintain an awareness of airport operations/traffic flow and control the flow of departure aircraft to provide for the efficient use of airport surfaces.

(2) Mark, in Box 12 of the Flight Progress Strip (FPS), the time that the aircraft calls ready (for jet aircraft, the time the aircraft is ready for push; for non-jet aircraft, the time the aircraft is ready for taxi).

(3) Contact ZBW TMU to obtain DSP Times for appropriate aircraft, and mark the issued DSP Time in Box 16 of the FPS (BG is also responsible for needed amendments/updates to previously issued DSP Times).

(4) Issue expected push/taxi times when it is necessary to delay/hold aircraft. The expected push/taxi time shall be marked in Box 15 of the FPS.

(5) Forward updates to expected push/taxi times to the flight crew as soon as possible. Box 15 of the FPS shall also be marked to reflect the update.

(6) Release, unless special circumstances warrant (DSP/EDCT Times, lifeguard/law enforcement aircraft, etc.), aircraft to Ground Control (for a particular runway) on a first come, first serve basis.

(7) Advise aircraft to "monitor" Ground Control (unless otherwise coordinated) when transferring communication of the aircraft to the Ground Controller(s).

(8) Issue push/taxi times, for those aircraft that are unable to transmit without engines running, to the pilot via telephone communication.

e. Clearance Delivery (CD). Clearance Delivery is responsible for the issuing of departure clearances through voice communication and is responsible to ensure that the clearances of participating users are transmitted via PDC Equipment. Additionally, Clearance Delivery shall:

(1) Perform the required strip marking and review all flight plans for completeness and accuracy.

(2) Verbally issue the appropriate initial altitude to all outbound aircraft, even though the initial altitude may be contained in the Standard Instrument Departure (SID) that has been issued (PDC transmitted clearances excluded).

NOTE - Flight Data (FD) may at times assist the Clearance Delivery Position by transmitting clearances via PDC Equipment.

(3) Coordinate with the OSC/CIC for IFR aircraft departing with a non-standard final altitude.

f. Flight Data (FD). Flight Data is responsible for the dissemination of information received from FDIO Equipment, and the Sun (Sun Airport Information System), and responsible for amendments/entries made in the FDIO and STARS Equipment. Additionally, Flight Data shall:

(1) Review all information that is disseminated through the Sun Airport Information System and forward pertinent information to the OSC.

(2) Perform the required strip marking and review all NAS flight plans for completeness and route integrity prior to forwarding the FPS to Clearance Delivery.

(3) Ensure that all flight plan amendments (FDIO and STARS Equipment) are complete and accurate.

(4) Ensure that the 'ATIS CONTENT' requirements of FAAH 7110.65, are met when preparing an ATIS broadcast.

(5) Ensure that the ATIS message is reviewed for completeness and accuracy by a person other than the one who prepared the original (preferably the OSC/CIC), prior to its being broadcast.

(6) Ensure that appropriate IDS5 pages are updated in a timely manner to reflect current information.

(7) Perform TMC functions in paragraph 3-3g.(1), (2), and (3), when a TMC is not on duty.

(8) Ensure that appropriate NOTAMS received from Bridgeport AFSS are entered into the IDS5.

g. Traffic Manager Coordinator (TMC). The TMC is responsible for ensuring that efficient and effective traffic management is maintained within the Terminal Traffic Management Unit, and that local traffic initiatives are integrated with national traffic management strategy. The TMC shall:

(1) Forward, to the OSC/CIC, all applicable Traffic Management restrictions and enter those restrictions on the appropriate IDS5 page(s) for dissemination.

(2) Forward, to the OSC/CIC, the receipt of all hazardous weather information.

(3) Calculate delays and post the delays in the appropriate locations/systems.

h. Cab Coordinator (CC). The CC shall, as necessary, provide general assistance to any/all tower positions. The OSC/CIC may further define the specific duties/responsibilities of the CC.

3-4. PIREPS, SIGMETS, CWAS.

a. The OSC/CIC is responsible to ensure that PIREPs are solicited and disseminated for each hour that the weather conditions exist or are forecasted to be as stated in FAAH 7110.65.

b. The TMC is responsible to forward the PIREP to Bridgeport AFSS in a timely manner. If no TMC is on duty, the OSC/CIC is responsible to ensure PIREPS are disseminated in a timely manner.

c. The OSC/CIC shall ensure that applicable SIGMETS and CWAS are disseminated as soon as possible. Applicable SIGMETS and CWAS shall then be posted on the appropriate IDS5 page(s) by the TMC. If a TMC is not on duty, SIGMETS and CWAS shall be posted by Flight Data (FD).

3-5. BRAVO HOLD POINT. The Bravo Hold Point shall be the clearance limit for aircraft outbound to Runways 9 or 4R, when the taxi route is via the Bravo Taxiway. Aircraft shall be assigned a runway and taxi route when a clearance past the Bravo Hold point is issued.

3-6. TOWER AIRSPACE COORDINATION.

a. General. Release of aircraft on non-standard runways or crossing active runways will often affect the operation of another controller's position of operation. These releases shall be accomplished according to the procedures in this paragraph.

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b. Procedures.

(1) Any A/C (e.g., heavy jets, missed approaches, emergencies) under the jurisdiction of LCE/LCW/LH, which affects (or may affect) the air traffic operation of another controller, shall be coordinated with the affected controller.

(2) Any coordination that involves runway or airspace jurisdiction, or releases of aircraft, shall be accomplished via land-line.

(3) When appropriate, LCW/LCE shall ensure that visual separation procedures are being applied in accordance with FAAH 7110.65, whenever landings or departures are being conducted to/from parallel runways. In the event that visual separation cannot be provided, coordination shall be with the affected Local Controller.

(4) Release requests shall include the Runway and the ACID, e.g., "REQUEST RELEASE RUNWAY 15R, DAL 219."

(5) Release approvals shall include the runway, the term "Observed and Released", and the ACID, e.g., "DAL 219 OBSERVED AND RELEASED RUNWAY 15R".

NOTE - The "observed" portion of the release is required to allow the responding controller to continue operations once the aircraft has been released and is no longer a factor.

(6) LCE/LCW shall obtain release from A90 prior to releasing/departing the first departure associated with a new runway configuration.

c. Special Operations in the Lower Portion of the Class B Airspace.

(1) When a Special Operation is taking place within a 5 NM radius of the BOS VORTAC, the position(s) responsible for the separation of that aircraft (LCE, LCW, or LH) shall:

- (a) Notify the OSC/CIC.
- (b) Place a "Special Operation" Strip in their strip bay.

(2) For the purposes of this paragraph, "Special Operations" are defined as:

- (a) Any type of fixed-wing operation (excluding aircraft landing/departing BOS).
- (b) Any type of photo or surveillance operation.
- (c) Any through flight/transition above 1,000' MSL.

d. Airspace Intrusions. The following guidelines should be adhered to in tracking and identifying aircraft that enter Class B airspace without authorization or without establishing communications with air traffic control.

(1) The OSC/CIC shall:

(a) Document the incident on FAA Form 7230-4, Daily Record of Facility Operations, as a Pilot Deviation – Airspace Intrusion.

(b) Ensure a track is initiated on the aircraft for tracking purposes.

- (c) Report the incident on FAA Form 8020-17, Preliminary Pilot Deviation Report.
 - (d) Obtain statements from personnel involved in observing, tracking, and identifying the intruding aircraft.
 - (e) Forward the information listed above to the Quality Assurance Support Specialist for processing.
- (2) Control Personnel shall:
- (a) Notify the OSC/CIC when an aircraft is suspected to have entered controlled airspace without authorization or communications.
 - (b) Attempt to establish communications, radar identify, and verify altitude of the intruder aircraft. If able to establish communications with the intrusion aircraft, advise the aircraft of his/her exact location, assist the aircraft in exiting the protected airspace, and request the pilot telephone the OSC/CIC.
 - (c) Start a track on the intrusion aircraft to enable Continuous Data Recording (CDR).
 - (d) Coordinate with adjoining facilities for identification of intrusion aircraft exiting BOS airspace.

3-7. MOVEMENT AREA OPERATING PRACTICES.

a. General Procedures.

- (1) LCW/LCE/GC1/GC2 shall place one of the colored 'vehicle' strips in their strip bay when a vehicle is on an active runway (except for vehicle runway crossings).
- (2) Either LCW/LCE/GC1/GC2 shall notify the OSC/CIC when that controller issues a clearance for a vehicle to operate on a runway (debris removal, maintenance, runway check, etc).
- (3) Whenever possible, vehicle operations on active runways should be in a direction opposite to aircraft traffic flows.
- (4) Local Control shall notify the OSC/CIC when a field check is about to begin, and has been completed.
- (5) Ground Control shall notify the OSC/CIC when an inactive runway has been requested for departure, or, when an inactive runway will be used as a taxi route for a departure aircraft. This notification shall be made prior to the inactive runway being used by the aircraft.

- (6) Normal airport vehicle movement should be by the perimeter roads or service access roads that do not intersect with movement areas.

(7) Whenever possible, vehicle crossings of active runways should be done at the departure end.

(8) Vehicles are expected to yield the right of way to emergency vehicles and all aircraft unless otherwise instructed by the Tower.

(9) Except for the segment of Taxiway A located between Taxiways L and K1, Tower personnel shall not assign Taxiway A to the following aircraft types: Airbus 340 (A340), Airbus 330 (A330), Boeing 777 models, and Boeing 747 models.

b. Coordination.

(1) Procedures.

(a) Conditional clearances between Local Controllers or between a Local Controller and a Ground Controller for runway crossings are prohibited.

(b) Body language, such as hand signals and head nods, shall not be used to effect control coordination.

(2) Runway Crossing Phraseology.

(a) State request with Runway, Intersection, number to cross, and, when other than an aircraft (vehicles), (e.g., "CROSS RUNWAY 33L AT DELTA WITH ONE", "CROSS RUNWAY 33L AT DELTA WITH ONE VEHICLE".).

(b) Wait for a specific response from the control position responsible for the active runway (e.g., "CROSS RUNWAY 33L AT DELTA WITH TWO", "CROSS RUNWAY 33L AT DELTA WITH ONE VEHICLE", "HOLD SHORT OF RUNWAY 33L".).

(c) Acknowledge clearance or hold short instructions.

(d) Notify the Control Position responsible for the active runway when, "CROSSING COMPLETE". When more than one runway is being crossed, each runway shall be addressed separately and specifically (e.g., "RUNWAY 33 LEFT AT DELTA, CROSSING COMPLETE", "RUNWAY 27 AT CHARLIE, CROSSING COMPLETE".).

(3) Abbreviated Interphone Message Format. Interphone Message Format (FAAH 7110.65) may be utilized for coordination between LCE and LCW provided:

(a) The Runway 33/27 or 27/33 Configurations are in use.

(b) The coordination is performed for the crossing of outbound aircraft across Runway 33L at Taxiway D or across Runway 27 at Taxiway C.

c. Stripmarking. All stripmarking shall be in accordance with Appendix 5, 'Strip Marking'.

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d. Responsibilities.

(1) Local Control is responsible for all aircraft and vehicles operating on active runways.

(2) Ground Control is responsible for all aircraft and vehicles operating on inactive runways and taxiways.

(3) The OSC/CIC is responsible for determining which runways are designated as active.

e. Runway/Taxiway Closures. When a taxiway or runway is closed, the OSC/CIC shall ensure:

(1) The closure is noted on the appropriate IDS5 pages.

(2) The closure is graphically depicted on the Field Lighting System and ASDE-3 Monitors (AMASS function).

(3) The colored Closed Runway Strips are placed in the GC1, GC2, LCW and LCE Strip Bays.

f. Lighting Systems under MPA/FAA Maintenance Control.

(1) The OSC/CIC shall note on the appropriate IDS5 pages, all runway lighting systems that are under MPA control.

Examples: 22L EDGE MPA CONTROL, 4R TDZ MPA CONTROL.

(2) The OSC/CIC shall note on the appropriate IDS5 pages, all approach lighting systems that are under FAA maintenance control.

Example: 22L MALSR FAA CONTROL.

(3) In addition to the requirements in (1) and (2) above, control of lighting systems by MASSPORT or FAA Maintenance shall be logged on BOS TWR Form 7230-4, Daily Record of Facility Operation.

3-8. LOCAL EAST/WEST CONSOLIDATION

a. General. Consolidation is performed when required, after careful consideration of traffic workload, complexity, weather, and staffing.

b. Procedures.

(1) A single Local Controller (at LCW) shall be utilized when:

(a) On the 33/27, 27/33, 15/9, 22/15, 27/27, 15/15, 33/33, and 4/15 runway configurations.

(b) On the 4/4, 4/9, 27/22 and 22/22 configurations a single Local Controller may be used at LCW (at the discretion of the OSC/CIC).

(c) On all other runway configurations when the weather falls below ceiling 600' or visibility falls to less than 1.5 miles.

(2) LCE shall perform the Cab Coordinator function when a single Local Controller is utilized (i.e., write arrival strips, assist/coordinate as appropriate, monitor the operation, and monitor the LCW Controller).

(3) When on the 33/27 and 27/33 Configurations, LCE shall serve as the crossing coordinator for outbound aircraft, write arrival strips, monitor the operation, and assist LCW as necessary.

(4) The IDS5 shall be updated to reflect the status of Local East/West by annotating the control position(s), active frequency(s), and runway(s) in use.

3-9. ACTIVE RUNWAY USE.

a. Vehicles and aircraft taxiing on or crossing active runways shall maintain radio communication with the effected Local East/West Controller, except as otherwise provided in this directive.

b. Arriving aircraft shall be retained on the frequency assigned to the Local East/West Controller responsible for the landing runway until that aircraft has cleared all runways/stopways assigned to that Local Controller.

c. Aircraft taxiing inbound/outbound shall be retained on the frequency assigned to the controller responsible for the aircraft until clear of that controller's area of jurisdiction.

d. Taxiing aircraft shall be instructed to hold short of a runway assigned to another controller and to monitor/contact the controller having jurisdiction for that runway. Departing aircraft taxiing to Runway 27 or Runway 33L shall be instructed to hold short of the appropriate crossing runway and shall (when appropriate) be given a frequency change to 119.1 (LCE Controller).

3-10. CONFIGURATIONS.

a. 4/9 and 4/4 Configurations.

(1) LCE shall have jurisdiction of Runways 4R and 9.

(2) LCW shall have jurisdiction of Runway 4L. LCW shall work Runway 15R departures (after coordination with GC and LCE for releases).

(3) LCW shall not assign departure headings any further east than 010°, without coordination with LCE.

(4) LCE shall not assign departure headings any further west than 040°, without coordination with LCW.

Procedures

3-11

(5) LCE shall obtain a release from LCW for all Runway 4R heavy jet and B757 departures.

(6) When ILS 15R - VAP 4L/22R are being conducted:

(a) A90 will advise these aircraft to "Expect Visual Approach Left Traffic Runway 4L" or "Expect Visual Approach Right Traffic Runway 22R" as appropriate.

(b) Local Control shall advise these aircraft to report the airport in sight. When the aircraft has the airport in sight and is in the appropriate position, clear the aircraft for a Visual Approach. When 'Area B' is under the jurisdiction of another controller (LCE or LH), LCW shall ensure that the aircraft remains at or above 1,000' MSL until clear of Area "B".

(c) Visual separation between the Runway 4R and 4L arrival must be applied.

b. 27/22 and 22/22 Configurations.

(1) LCE shall have jurisdiction of Runways 27 and 22L.

(2) LCW shall have jurisdiction of Runway 22R. LCW shall work Runway 15R departures (after coordination with GC and LCE for releases).

(3) Missed Approaches. In the event of a 22L or 27 missed approach, LCE shall immediately coordinate with LCW for initial heading assignment and traffic information. LCW shall determine the initial heading; LCE shall retain communication and issue the heading required by LCW.

(4) LCE shall coordinate with LCW for releases of all Runway 22L departures.

c. 33/27 Configuration.

(1) LCW shall have jurisdiction of all active runways.

(2) GC shall restrict the Runway 27 departures short of Runway 33L (at Taxiway Delta) and restrict the Runway 33L departures short of Runway 27 (at Taxiway Charlie). GC shall instruct outbound aircraft to monitor 119.1 (LCE), or 128.8 (LCW) when LCW and LCE are combined, when no further communication with the aircraft is required.

(3) Aircraft that will depart Runway 33L from Golf Taxiway or Runway 27 from Charlie Taxiway shall be instructed to monitor Tower on 128.8 (LCW).

(4) LCE/LCW shall coordinate via the land-line for crossing Runway 33L at Delta and Runway 27 at Charlie (outbound aircraft). This coordination shall not be affected/initiated until the outbound aircraft are abeam or past Taxiway G.

(5) LCE shall write arrival strips for LCW.

(6) The Local Helicopter Position (LH) should be staffed whenever the 33/27 Configuration is in use.

d. 27/33 Configuration.

(1) Runway 27 is the primary arrival runway and Runway 33R is the secondary arrival runway.

(2) Runway 33L is the primary departure runway.

- (3) The 33/27 Video Map (and associated defined airspace) shall be utilized.
- (4) LCW shall have jurisdiction of all active runways.
- (5) LCE shall act as the crossing coordinator for outbound aircraft and write arrival strips for LCW.
- (6) GC shall restrict the Runway 27 departures short of Runway 33L (at Taxiway Delta) and restrict the Runway 33L departures short of Runway 27 (at Taxiway Charlie). GC shall instruct outbound aircraft to monitor 119.1 (LCE), or 128.8 (LCW) when LCW and LCE are combined, when no further communication with the aircraft is required.
- (7) Aircraft that will depart Runway 33L from Golf Taxiway or Runway 27 from Charlie Taxiway shall be instructed to monitor Tower on 128.8 (LCW).
- (8) LCE/LCW shall coordinate (via the land-line) for crossing Runway 33L at Delta and Runway 27 at Charlie (outbound aircraft). This coordination shall not be affected/initiated until the outbound aircraft are abeam or past Taxiway G.
- (9) The Local Helicopter Position (LH) should be staffed whenever the 27/33 Configuration is in use.

3-11. STRIP MOVEMENT. Strip movement shall be in accordance with Appendix 6, 'Strip Movement'.

3-12. GPS/FMS/RNAV STANDARD INSTRUMENT DEPARTURE (SID).

a. When verbally issuing a GPS/FMS/RNAV SID, ensure that a fix/navaid noted in the procedure (as appropriate to the filed route or PDR), and an initial altitude of 5,000', is included in the clearance.

Example: "Cleared to.....via the WYLYY FIVE Departure, BOSOX, as filed. Maintain 5,000, expect flight level 280"

b. The WYLYY (X) SID shall be assigned by Clearance Delivery (CD) to all eligible jet aircraft that are expected to depart on Runway 27.

c. Radar services utilizing the Airport Surveillance Radar (ASR-9) are required for the WYLYY (X) SID to be issued/utilized.

d. For those aircraft that are no longer on the Clearance Delivery frequency, and were not initially assigned a GPS/FMS/RNAV SID (runway change), BG, GC1, GC2, LCW, LCE (as appropriate) should ensure that the GPS/FMS/RNAV SID is subsequently assigned to all eligible jet aircraft that will depart on Runway 27.

Procedures

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e. A 'W' followed by current SID number ('W5' for WYLYY FIVE) shall be noted on the Flight Progress Strip (in Box 10) of all aircraft that have been assigned the WYLYY SID.

f. When it is necessary to assign the standard/current Logan SID to an aircraft that was initially assigned the WYLYY SID (runway change, closure, etc.), the 'W5' (W followed by current SID number) shall be crossed out when the standard/current Logan SID has subsequently been issued.

3-13 SECOND GROUND CONTROL POSITION.

a. General.

(1) GC1 is the primary ground control position. When only one ground controller is being utilized, GC2 shall be combined to GC1.

(2) The Ground Control frequencies allocated to Boston Tower are 121.9 (for GC1) and 121.75 (for GC2).

(3) The GC2 Position shall be opened/staffed at the discretion of the OSC/CIC.

(5) Coordination between GC1 and GC2 pertaining to movement and jurisdiction of aircraft need not be performed via the land-line. However, all coordination pertaining to the use and jurisdiction of runways (active or inactive) shall be performed via the land-line.

(6) The ground control frequency issued by Clearance Delivery (CD)/Boston Gate (BG) for pushback-taxi instructions shall coincide with the location of the aircraft in reference to the ground controllers area of jurisdiction.

NOTE - CD/BG shall issue 121.9 (GC1) to aircraft parked at South Cargo and aircraft parked north of Gate 21 at Terminal B. CD/BG shall issue 121.75 (GC2) to aircraft parked west of (and including) Gate 21 at Terminal B.

(7) Inbound/arrival aircraft shall be issued the ground control frequency associated with the position (GC1 or GC2) that has jurisdiction over that area/taxiway.

b. Areas of Jurisdiction. For all runway configurations, the area of jurisdiction for each ground controller is delineated by Taxiway K3.

(1) GC2 (121.75) shall have jurisdiction of the areas that lie west-northwest of (but not including) Taxiway K3.

(2) GC1 (121.9) shall have jurisdiction of all other taxiways and inactive runways.

c. Outbound Taxi Instructions.

(1) When an outbound aircraft has to enter the area of jurisdiction of the subsequent ground controller in order to get to the departure runway, the ground controller that initially works the aircraft shall:

(a) Issue the departure runway.

3-14

Procedures

(b) Issue the route to be used up to the hold point that is to be issued.

(c) Issue a frequency change to the aircraft prior to it arriving at the hold point.

(2) The subsequent ground controller is responsible to issue:

(a) The departure runway.

(b) The route remaining to get to the departure runway.

(c) All appropriate remaining hold short restrictions.

d. Examples/Scenarios for Outbound Aircraft.

(1) 27/22 Configuration, USA123 to depart on Runway 22R:GC2: 'USA123, Runway 22R taxi via K, hold short of Taxiway K-3.'

GC2: 'USA123, monitor/contact 121.9.'

GC1: 'USA123, taxi to Runway 22R via K and N.'

(2) 33/27 Configuration, DAL1035 to depart on Runway 27:

GC2: 'DAL1035, Runway 27 taxi via K, hold short of Taxiway K-3.'

GC2: 'DAL1035, monitor/contact 121.9.'

GC1: 'DAL1035, Runway 27 taxi via K, C and D, hold short of Runway 33L.'

(3) 4/9 Configuration, USA409 to depart on Runway 4R:

GC2: 'USA409, Runway 4R taxi via K, hold short of Taxiway K-3.'

GC2: 'USA409, monitor/contact 121.9.'

GC1: 'USA409, taxi to the Bravo Hold Point via B, expect Runway 4R.'

e. Coordination between GC1 and GC2 shall be affected as to whether aircraft shall be instructed to 'contact' or 'monitor' the subsequent ground controller.

f. Additional Coordination Requirements.

(1) When the 27/22, 22/22, 4/9, 4/4 configurations are in use, coordination for the control/jurisdiction of Runway 15R/33L shall be effected between LCW and GC1.

(2) When the 33/27, 27/33, 33/33, configurations are in use, coordination for the control/jurisdiction of Runway 4R/22L shall be effected between LCW and GC1.

(3) Local Helicopter (LH) shall coordinate with the appropriate Ground and/or Local Controller(s) for the use of taxiways/runways for helicopter operations.

3-14. LNG TANKER OPERATIONS.

a. The OSC/CIC shall note on Form 7230-4, Daily Record of Facility Operation, the time when an inbound LNG Tanker is abeam Deer Island, and the time when an outbound LNG Tanker is abeam Deer Island.

b. Aircraft shall not be allowed to over fly an LNG Tanker (inbound or outbound), which is west of Deer Island.

Procedures

3-15

c. In addition to the restriction in Paragraph b, the USCG has requested that aircraft be kept a minimum of 1000 feet laterally away from inbound tankers.

NOTE - The above restriction equates to a lateral buffer zone approximately the length of an LNG Tanker, in front of, and behind, inbound tankers (LNG Tankers are approximately 925 feet in length).

d. Flight paths of aircraft arriving on Runway 33L or departing on Runway 15R need not be altered due to the presence of an LNG Tanker. These aircraft are exempt from the restrictions in Paragraphs b and c above.

e. When an LNG Tanker is moored/docked at the DistriGas Facility, aircraft are not allowed within a 1 NM radius, up to 3000 feet MSL, of the DistriGas Facility. Fixed-wing aircraft that are arriving/departing BOS and Med-Flight/Life-Flight/law enforcement aircraft are exempt from this restriction.

NOTE - The LNG Command Post (617-223-5750) should be notified as soon as possible of Med-Flight/Life-Flight/law enforcement flights.

f. All personnel shall follow the National guidance for the reporting of suspicious aircraft/pilot activities, regarding aircraft operations in proximity to LNG Tankers. Additionally, suspicious aircraft/pilot activities associated with the presence of LNG Tankers shall also be reported to the LNG Command Post at 617-223-5750.

3-15. REPORTING OF DEPARTURE DELAY(S) OF 90 MINUTES OR MORE. The OSC/CIC shall notify the Facility Manager (BOS-1), Boston ARTCC TMU, and the ATCSCC, of departure delay(s) of 90 minutes or more. This notification need not be made for aircraft that are delayed due to an EDCT. An entry (noting the time the notifications were made) shall be made on Form 7230-4, Daily Record of Facility Operation.

3-16.-3-99. RESERVED.

CHAPTER 4. RUNWAY SELECTION AND ASSIGNMENT

4-1. RUNWAY SELECTION.

a. Runway selection shall be determined by the OSC/CIC after consultation with the TMC, and A90, considering the following criteria:

- (1) Current and forecasted weather.

- (2) Runway availability (e.g., closures scheduled MPA/FAA maintenance activity).
- (3) Noise mitigation.

b. STMC's shall determine the flows to meet the runway configuration.

c. If a pilot prefers to use a runway other than that specified, the pilot is expected to advise ATC. ATC shall honor such requests, advise pilots when the requested runway is noise sensitive, and issue expected time of departure.

d. Order 8400.9, National Safety and Operational Criteria for Runway Use Programs, shall be utilized to determine maximum crosswind/tailwind components allowable for use of a specified runway.

e. A Runway Use program has been established at Logan International Airport. As such, the Preferential Runway Advisory System (PRAS) recommendations shall be considered before Runway Configuration determinations are made.

f. The Terminal Doppler Weather Radar Display (TDWR) shall be used as the wind source for Boston Logan Airport operational purposes. The Airport Wind (AW) data from this system will be available via the IDS5 monitors.

4-2. RUNWAY ASSIGNMENTS. All departing aircraft shall be assigned the primary jet departure runway with the following exceptions for non-jet aircraft:

a. 4/9, 4/4 Configurations: Aircraft with 'on-course' headings of 225° through 070° (VFR Exit Fixes: K, Y, X, A, M, P) shall be assigned Runway 4L (unless noise abatement requirements dictate otherwise).

b. 33/27 Configuration: Between sunrise and sunset (provided the intersection is visible from the Tower), aircraft with 'on-course' headings of 245° through 095° (VFR Exit Fixes: Y, X, A, M, P) should be assigned an intersection departure on Runway 33L from Golf Intersection. Between sunset and sunrise and during times that the intersection is not visible from the Tower, the OSC shall determine the departure point/runway for these aircraft.

4-3. BIRD HAZARDS.

a. General. Aircraft bird strikes are known to be a serious threat to the safe operation of aircraft on and around airports. MASSPORT is primarily responsible for providing a safe environment for the operation of aircraft at the airport, including detection and control of existing or potential bird hazards. A bird hazard is considered to exist whenever the birds are in sufficient numbers to be potentially hazardous to aircraft operations.

Runway Selection and Assignment

4-1

b. Procedures.

(1) The Tower Cab OSC/CIC shall advise MASSPORT Operations of intent to use any runway that has been dormant (not used for an arrival or departure) for 2 hours or more. Notification to MASSPORT (via ADS Line 2222) of intent to use such runway(s) shall be made as soon as possible.

(2) The Tower Cab OSC/CIC shall advise MASSPORT Operations of any reported bird strike or any observed/reported increase in bird activity on or around the airport.

(3) Bird activity of moderate or greater shall be included in the ATIS broadcast.

4-4. RUNWAY 15L/33R PERIMETER ROAD LIGHTING SYSTEM. The OSC/CIC shall notify the Massport Communications Center of the intent to utilize Runway 15L/33R as an active runway, and turn the Runway 15L/33R Perimeter Road Lights 'on'.

NOTE - The Runway 15L/33R Perimeter Road Lights shall be kept on whenever Runway 15L/33R is in use and shall not be turned on/off in between arrivals or departures.

4-5.-4-99. RESERVED

4-2

Runway Selection and Assignment

CHAPTER 5. CATEGORY I/II/III OPERATIONS

5-1. GENERAL. This chapter provides guidance to actions that shall be taken prior to or during Category II/III approach operations to Runway 4R.

5-2. PROCEDURES.

- a. The OSC/CIC shall:

(1) Notify the AOCC and the A90 OSC/CIC when the visibility is actually or forecasted to be at or less than 1/2 statute mile (2400 RVR) and/or ceiling at or below 300 feet. Enter the AOCC Technician's name and time notified on the Daily Operations Log (7230-4).

(2) Notify the AOCC when the MASSPORT 4R Category II and the FAA 4R Approach Lighting System (ALS) engine generators have been activated or deactivated. Enter the AOCC Technician's name and time notified on the Daily Operations Log (FAA Form 7230-4).

(3) Issue the appropriate NOTAM through BDR AFSS when Category II or III approaches are not authorized (i.e., BOS ILS CAT II NA or BOS CAT III NA).

b. The OSC/CIC shall:

(1) Ensure that the provisions contained in the reference documents are met including the availability of ASDE for ship detection purposes.

(2) Be familiar with the requirements for Category II and III Operations as provided in Appendix 2.

(3) Ensure that the MASSPORT 4R Category II and the FAA 4R ALS Category II engine generators have been activated.

(4) Not conduct Category II/III approaches when the Runway 4R Approach Area (in the channel/harbor) is not under ASDE surveillance.

c. The Ground/Local Controller(s) shall ensure that when weather conditions are less than ceiling 800' and/or visibility less than 2 miles and the runway is being utilized as an arrival runway, aircraft/vehicles are instructed to hold short of ILS Critical Areas/ILS Hold Points.

5-3 TALL VESSEL ADVISORIES.

a. General. The procedures contained in this section pertain to arrivals to Runway 4R and departures on Runway 22L.

b. Definitions.

(1) Approach/Departure Trapezoid. The trapezoid depicted on the ASDE display that extends from the approach end of Runway 4R southwestward across the inner harbor channel.

(2) Tall Vessel. Any vessel (or any part of a vessel) located within the Approach/Departure Trapezoid that exceeds the height allowed by the digitized line on the Ship Channel Camera System.

Category I/II/III Operations

5-1

c. General Procedures.

(1) All vessels (or parts thereof) detected in the Approach/Departure Trapezoid shall be considered a 'Tall Vessel' unless determined otherwise by the Ship Channel Camera System.

(2) Tall Vessel advisories shall be provided to flight crews when the weather is below a ceiling of 800 feet, or, when the visibility is less than 2 miles.

NOTE - In weather conditions at/above 800/2, Tall Vessel advisories shall be provided as deemed appropriate.

(3) The terms 'Tall Vessel' and 'Approach Area' or 'Departure Area' (as appropriate) shall be included in the advisory that is given to the flight crew. Examples: 'Delta 123 tall vessel in the approach area,' 'United 123 tall vessel in the departure area.'

d. Vessels with heights in excess of 176 feet.

(1) When a vessel (or part of a vessel) with a height in excess of 176 feet is in the Approach/Departure Trapezoid, the following operations on Runway 4R/22L are prohibited in all weather conditions:

(a) Arrivals on, and approaches to, Runway 4R.

(b) Departures on Runway 22L.

(2) Coordination shall be affected with A90 when arrival/departure flows may have to be altered due to the presence of vessels with heights in excess of 176 feet.

(3) The OSC/CIC shall note on Form 7230-4, Daily Record of Facility Operation, the time when a vessel with a height in excess of 176 feet enters and exits the Approach/Departure Trapezoid.

NOTE - The Boston Harbor Pilots are expected to provide the OSC/CIC with height information on all vessels that they are aware of that have a height above 85 feet. In the event that a large vessel is observed and its height information has not been received, the Boston Harbor Pilots can be reached at 617-569-4500.

5-4. DUAL HOLD LINES.

a. General. This paragraph provides guidance to actions that shall be taken during weather conditions below ceiling 800' and/or visibility less than 2 miles. ILS Hold Lines have been established for Runways 4R, 22L, 15R and are depicted in Appendix 3.

b. Definitions.

(1) ILS Hold Line. The point at which aircraft/vehicles must hold when conditions are less than ceiling 800' or visibility less than 2 miles and the associated runway is being utilized for arrivals.

(2) Visual Hold Line. The hold lines which are used to hold aircraft/vehicles short of the arrival runway when the weather conditions are ceiling 800' or better and visibility 2 miles or better.

5-2

Category I/II/III Operations

c. Procedures.

(1) The OSC/CIC shall ensure that the provisions contained in this section are met.

(2) The Ground/Local Controller shall not authorize vehicles/aircraft to operate beyond the ILS hold line whenever an arriving aircraft is inside the ILS outer marker (OM) or the fix used in lieu of the OM when conditions are less than reported ceiling 800 feet and/or visibility 2 miles unless the arriving aircraft has reported the runway in sight or is circling to land on another runway, except:

(a) For a preceding arriving aircraft on the same or another runway that passes over or through the ILS critical area while landing or exiting the runway, or;

(b) For a preceding departing aircraft or missed approach on the same or another runway that passes through or over the area.

(3) Do not authorize vehicles or aircraft operations in or over the localizer critical area when an arriving aircraft is inside the middle marker when conditions are less than reported ceiling 200 feet and/or RVR 2,000 feet.

(4) When the weather conditions are below ceiling 800' and/or visibility less than 2 miles (and Runway 15R is being utilized as an arrival runway), aircraft outbound to Runway 15R shall be assigned an intersection departure at Zulu Taxiway.

NOTE - Restrictions relating to the use of 'Position and Hold' during nocturnal hours and periods of low visibility do NOT apply to departures from the Zulu Taxiway. The restrictions do not apply due to the location of the Zulu Taxiway in relation to the Runway 15R Displaced Threshold.

5-5. REMOTE STATUS & INTERLOCK UNIT (RSIU)/FAR FIELD MONITOR (FFM).

a. General. This section provides necessary guidance for the use and interpretation of the FFM. Inclusion of the FFM supports increased demand for CAT II/III operations by providing immediate indications of localizer inoperative or out-of-tolerance conditions, i.e., the FFM may alarm due to an outage or the localizer course may have shifted due to vehicle/aircraft encroachment into the critical area.

b. Responsibilities.

(1) The OSC/CIC shall:

(a) When 4R RVR is below 2400',

1 Ensure the tower RSIU toggle switch is in the "CAT 2/3-Alarm ON" position.

2 Ensure the tower RSIU unit is in "Normal" (non bypass) mode.

Category I/II/III Operations

5-3

(b) Notify the AOCC whenever the FFM alarms.

(c) Suspend CAT II & III operations when the FFM is in "alarm" status until a "normal" FFM indication is observed.

(2) Operational Personnel shall:

(a) Adhere to the procedures contained in FAAH 7110.65, Far Field Monitor Remote Status Unit.

(b) Issue the cautionary advisory "CAUTION, MONITOR INDICATES RUNWAY 4R LOCALIZER UNRELIABLE" when required.

(c) Advise the OSC/CIC when the prevailing weather/RVR affects the FFM RSIU mode setting.

5-6.-5-99. RESERVED

CHAPTER 6. POSITION CONSOLIDATION

6-1. GENERAL. Consolidating positions is the responsibility of the OSC/CIC. Consolidation is performed when required, after careful consideration of traffic workload, complexity, weather, and staffing. Additionally, positions shall only be combined when all required duties/responsibilities of each position can be accomplished by the combined position.

6-2. PROCEDURES.

- a. Tower consolidation of positions, when appropriate, shall be accomplished as follows:
 - (1) The LCE and LCW positions shall be consolidated at the discretion of the OSC/CIC.
 - (2) Boston Gate at Clearance Delivery.
 - (1) Local Helicopter at LCE or LCW.
 - (4) Ground Control 2 at Ground Control 1.
 - (5) Tower Midnight Configuration:
 - (a) Boston Gate, Flight Data at Clearance Delivery.
 - (b) Helicopter, LCE, Ground Control at LCW.

6-3. CHECKLIST.

- a. Consolidation.
 - (1) Select/deselect frequencies.
 - (2) Advise affected facilities as necessary.
 - (3) Call forward the communication system..
 - (4) STARS combine/decombine as required.
 - (5) Complete position relief brief.
- b. Deconsolidation.
 - (1) Cancel call forwarding of communication system.
 - (2) Advise affected facilities as necessary.
 - (3) Select/deselect frequencies.
 - (4) STARS combine/de-combine as required.
 - (5) Complete position relief brief.

6-4.-6-99. RESERVED.

7-1. RESPONSIBILITIES.

a. The OSC/CIC shall.

(1) Notify the AOCC in the event of PDC equipment problems/outages.

(2) Enter PDC equipment outages on the Tower Daily Record of Facility Operation (Form 7230-4).

b. General.

(1) The Clearance Delivery Position (CD) is responsible to ensure that clearances are transmitted via PDC equipment.

NOTE - Flight Data (FD) may at times assist the Clearance Delivery Position by transmitting clearances via PDC equipment.

(2) Clearances issued through PDC shall contain at least the following information:

(a) Standard Instrument Departure (SID) - (in Option Field 1).

(b) Departure Frequency - (in Option Field 2).

(c) Frequency information for push/taxi - (in Option Field 3).

(3) Option Fields 4, 5 and 6 may be used for improvised or controller-generated text for traffic management or other operational information. Improvised or controller-generated text shall not contain Air Traffic Control (ATC) instructions. Free text shall be clear and concise and written so it can be clearly understood by the flight crew.

(4) All control instructions (including; interim altitude assignments, headings to be flown, etc.) that differ from what is contained in the Standard Instrument Departure (SID) shall be issued verbally by the appropriate controller.

(5) All clearances shall be reviewed for accuracy and route integrity prior to being transmitted.

7-2. RESTRICTIONS.

a. The following types of clearances shall not be issued through PDC equipment:

(2) Clearances in which the PDR/PDAR does not connect with the filed route of flight.

(3) Revised or amended flight plans (including Company, ATCSCC, TMU, and ZBW reroutes).

(3) Full Route Clearances (FRC).

(4) Any clearance that cannot be clearly understood or that may cause pilot misinterpretation.

b. Test Status for Participants. When an upcoming PDC participant is in test status (prior to the PDC issued clearances being valid for operational use):

(1) Send/transmit all clearances that appear in the PDC Workstation.

(2) Ensure that each test clearance issued contains the message 'TEST MSG ONLY CALL TWR FOR ATC CLRNC'.

(3) Issue the clearance verbally via voice communication at Clearance Delivery.

7-3. STRIP MARKING.

a. Box around the strip CID to indicate that transmission of the clearance via PDC equipment was unsuccessful or that for some other reason the clearance should not be transmitted via PDC equipment. The clearance shall be issued via voice communication at Clearance Delivery.

b. If a revised flight plan/clearance is received after the initial clearance was transmitted via PDC, Flight Data (FD) shall locate the original clearance/strip, place a large X over the route of flight, and place the revised flight plan at Clearance Delivery. The large X on the Flight Progress Strip indicates that the aircraft must be directed to contact Clearance Delivery and obtain a new clearance (via voice communication).

7-4.-7-99. RESERVED.

8-1. STRIP MARKING. Arrival and Departure strips shall be maintained and annotated in accordance with Appendix 5, 'Strip Marking'.

8-2. STRIP MOVEMENT. Arrival and Departure strip movement shall be in accordance with Appendix 6, 'Strip Movement'.

8-3 VFR EXIT FIXES. VFR Exit Fixes shall be determined by the chart in Appendix 7, 'VFR Exit Fixes'

8-4. -8-99. RESERVED.

9-1. HIJACK AREAS. Unless MPA/FBI requests otherwise, hijack aircraft will be requested to park at one of the following areas:

- a. Primary Area. Taxiway U, adjacent to the approach end of Runway 4R, facing easterly.
- b. Alternates.

(1) Alternate 1 - On Runway 15R/33L, between Taxiways L and N, facing southeast.

(2) Alternate 2 - On Runway 4L, between Taxiways C and S, facing northeast.

9-2. BOMB THREAT AREAS. Unless MPA advises otherwise, bomb threat aircraft shall be taxied or towed to one of the following search areas:

- a. Area 1 - Runway 4L, between Taxiways C and S.
- b. Area 2 - Runway 15R/33L, between Taxiways L and Z.

9-3. ENGINE RUNUP AREAS. The designated engine run-up areas are:

- a. Taxiway C, adjacent to the approach end of Runway 33L.
- b. Taxiway U, adjacent to the approach end of Runway 4R.

9-4. RUNWAY SAFETY AREAS NEAR TAXIWAY B. The Runway Safety Areas that are located at the departure ends of Runways 27 and 22R are now 1000 feet in length. Aircraft can be authorized to utilize Taxiway B when certain operations are simultaneously taking place on Runway 27 or 22R. This paragraph contains guidance on the utilization of the portions of Taxiway B that lie beyond these Safety Areas. Appendix 8 contains a diagram that depicts these Safety Areas.

- a. Runway 27 Runway Safety Area.

(1) Aircraft are not permitted on the portion of Taxiway B that lies beyond (west of) the Runway 27 Safety Area when an aircraft is departing on Runway 27.

(2) Aircraft may be permitted on the portion of Taxiway B that lies beyond (west of) the Runway 27 Safety Area when an aircraft is landing on Runway 27 provided the arriving aircraft is given the following advisory:

'TRAFFIC, A (aircraft type) ON TAXIWAY B, BEYOND THE RUNWAY SAFETY AREA '

(3) Aircraft arriving on Runway 9 are not allowed to over fly aircraft that are on the portion of Taxiway B that lies beyond (west of) the Runway 27 Safety Area.

- b. Runway 22R Runway Safety Area.

(1) Aircraft are not permitted on the portion of Taxiway B that lies beyond (southwest of) the Runway 22R Safety Area when an aircraft is departing on Runway 22R.

(2) Aircraft may be permitted on the portion of Taxiway B that lies beyond (southwest of) the Runway 22R Safety Area when an aircraft is landing on Runway 22R provided the arriving aircraft is given the following advisory:

‘ TRAFFIC, A (aircraft type) ON TAXIWAY B, BEYOND THE RUNWAY SAFETY AREA ‘

(3) Aircraft arriving on Runway 4L are not allowed to overfly aircraft that are on the portion of Taxiway B that lies beyond (southwest of) the Runway 22R Safety Area.

NOTE - Any future procedural updates pertaining to aircraft operations on Taxiway B that are affected by the Safety Areas will first be coordinated with the Flight Standards and Airports Division.

9-5. FULL LENGTH USE OF RUNWAY 4R. The full length of Runway 4R (including the paved surface that leads up to the displaced threshold) is authorized for landings during daylight hours in VFR meteorological conditions. Personnel need to be aware that (for separation criteria) Runway 4R actually starts at the beginning of the paved surface (approximately 1155' from the displaced threshold) in day-VFR conditions.

NOTE - Flight crews are made aware of the above procedure via a page in the Special Notices Section of the Airport/Facility Directory.

9-6. MINIMUM ALTITUDES (FIXED WING VFR AIRCRAFT). FAR PART 91 prohibits an airplane from operating below 1,000' above the highest obstacle within a 2,000' radius over a congested area (except for the purposes of taking off or landing). The Boston Flight Standards District Office (FSDO-01) has determined that 1,100' MSL is generally in compliance with this regulation for airplanes operating over land in the lower portion (within 8 NM) of the Boston Class B airspace. Additionally, FSDO-01 has determined minimum altitudes (for airplanes) at the following locations:

- a. Fenway Park - 1,400' MSL.
- b. Nickerson Field (B.U.) - 1,100' MSL.
- c. Harvard Stadium - 1,100' MSL.
- d. Alumni Stadium (B.C.) - 1,400' MSL.

NOTE - The altitudes above are minimum altitudes. Higher altitudes may be issued if traffic circumstances warrant.

9-7.-9-99. RESERVED.