



BOSTON ARTCC (vZBW) STANDARD OPERATING PROCEDURE

**BRADLEY ATCT (KBDL)
BRADLEY APPROACH (Y90)**

<i>RELEASE RECORD</i>			
Version	Date	Author	Notes
1.0	24 April 2009		Initial Release
1.1	23 Feb 2015	BN	Preferred taxi routes, re-formatting

CHAPTER 1. OVERVIEW

- a. This document outlines the air traffic control procedures and responsibilities for controllers working positions at BDL ATCT and/or Y90 TRACON.

(1) Quick Reference Sheets	p. 2
(2) Chapters 2-4 Tower Operating Procedures	pp. 4-8
(3) Chapter 5-6 Radar Operating Procedures	pp. 9-12
(4) Chapter 7 Interfacility Coordination	pp. 13-17
(5) Chapter 8 Appendices	pp. 18-20

b. **Callsign Usage and Frequency Delegation:**

- (1) The following callsigns and frequencies shall be used when working positions at BDL ATCT or Y90 TRACON.

I. BDL_DEL	Clearance Delivery (BD)	121.75	(Chapter 2)
II. BDL_GND	Ground Control (BG)	121.90	(Chapter 3)
III. BDL_TWR	Local Control (2T)	120.30	(Chapter 4)
IV. BDL_APP	Bristol Radar (BR)	123.95	(Chapter 5)
V. BDL_W_APP	West Radar (WR)	125.35	(Chapter 6)

Quick Reference Sheets**BDL_DEL (121.75)**

Initial Altitude IFR Aircraft: 4000 feet

Departure Procedures: BRADLEY DP, radar vectors to (FIX) or COASTAL DP (HI), (GEDIC/SHERL) Transition

Departures to KBOS: Jets: HFD V58 THUMB PVD KRANN(x) @ 3000 or 5000
Props: PUT PUT105 WOONS(x) @ 3000 or 5000

BDL_GND (121.9)

Taxi Routes: Refer to Appendix 4 for preferred taxi routes. Use caution when runway 1/19 is active when taxiing aircraft on taxiways Sierra or Charlie to prevent runway incursions.

Intersection Departures: Coordinate all intersection departures with Tower prior to transferring communications to Tower.

BDL_TWR (120.3)

Airspace: 5 NM from Windsor Locks Airport from surface to 3,000 feet.

Runways: At least two runways shall be open at all times when possible.

Calm Wind: Runways 24 and 33 are active when the winds are calm.

Flow:	Corridor:
<u>6/33</u>	310° - 095°
<u>24/33</u>	220° - 350°
<u>24/15</u>	150° - 280°
<u>6/15</u>	360° - 150°
RWY 1	350° - 030°

Departure:	RWY/Heading:
BDL(x)	24/RH 6/075° 33/RH 15/RH
CSTL(x)	24/180° 6/RH 33/220° 15/RH
DCT VEERS	24/280° 6/095° 33/RH 15/RH

BDL_APP (123.95/127.22)

DPK STAR	MAD at 11,000	Expect handoff at MAD
STELA STAR	STELA at 11,000	Expect handoff at CANAN
GDM.V229.WITNY	4,000/6,000/8,000/10,000	Expect handoff at GDM
HFD.BDL	5,000/7,000/9,000	Expect handoff at boundary

	ILS Frequency/Course	Final Approach Fix/altitude
BDL ILS 6	111.1 – 058°	HUNEE @ 1,800
BDL ILS 24	111.1 – 238°	MOTEL @ 2,100
BDL ILS 33	108.55 – 328°	HOMEY @ 1,800

CHAPTER 2. CLEARANCE DELIVERY

a. Frequency

(1) Clearance Delivery will use frequency 121.750.

(2) The voice channel will be: **BDL_121.750**.

b. Altitude Assignments.

(1) Assign all IFR departures 4,000 feet, or lower requested altitude.

(a) EXCEPTION: Departures that will land in Y90 airspace shall be assigned 3,000 feet as a final cruise altitude.

(2) Assign all VFR departures requesting radar services 2,500 feet, or lower requested altitude.

(3) Assign all VFR departures who have specifically declined radar services 2,000 feet, or lower requested altitude.

(4) Aircraft shall expect requested altitude ten (10) minutes after departure.

c. VFR Aircraft.

(1) VFR aircraft requesting radar services shall be assigned the appropriate altitude, departure frequency, and discrete squawk code.

(a) *“Maintain VFR at or below 2,500 until advised. Departure frequency 123.95, squawk 5421.”*

(2) If a VFR aircraft has specifically declined radar services, do not assign a discrete squawk code. However, still assign the appropriate initial altitude.

(a) *“Maintain VFR at or below 2,000 until advised.”*

(3) SVFR

(a) All Special VFR (SVFR) departures shall be instructed to maintain SVFR at or below 2,000 feet.

d. IFR Aircraft.

- (1) Clear IFR aircraft via the appropriate preferred routing.
 - (a) If an aircraft is unable to accept a preferred route, coordinate with the appropriate ZBW controller(s) to determine an acceptable route.
- (2) The **BRADLEY DP** is the primary Departure Procedure from BDL. This departure procedure shall be assigned by Clearance Delivery to all aircraft; however it shall not be inserted into the Flight Plan.
 - (a) *“Cleared to (destination) via the BRADLEY (#) Departure, radar vectors (first fix), then as filed.*
- (3) Departures that have filed for the **COASTAL DP (HI)** may be cleared via this procedure instead of the BRADLEY DP. Clearance Delivery must insert this into the Flight Plan.
 - (a) *“Cleared to (destination) via the COASTAL (#) Departure, (GEDIC/SHERL) transition, then as filed.*
- (4) Departures to KBOS (Boston Logan International) and A90 south satellites (OWD/1B9/GHG)
 - (a) All **jet** aircraft shall be routed via HFD V58 THUMB PVD KRANN(x) at 3,000 or 5,000.
 - (b) All **prop** craft shall be routed via PUT PUT105 WOONS(x) at 3,000 or 5,000
- (5) Departures to A90 North satellites (BED/LWM/BVY/FIT/6B6/2B2)
 - (a) All aircraft shall be routed via DREEM at 3,000 or 5,000
 - (b) Aircraft unable to navigate direct DREEM may be routed via HFD053.DREEM.BOS at 3,000 or 5,000.

CHAPTER 3. GROUND CONTROL

a. Frequency

(1) Ground Control will use frequency 121.900.

(2) The voice channel will be: **BDL_121.900**.

b. Ground Control is responsible for the movement of aircraft on all airport movement areas, excluding any active runway(s).

c. For the purposes of runway crossings, all runways, with the exception of Runway 1/19, shall be considered active at all times unless specifically advised by Local Control.

d. Ramp Areas.

(1) There are many different ramp locations located on different parts of the airport - military ramps, General Aviation ramps, Cargo ramps, and Terminals. Ensure that you know where an arrival is taxiing to before issuing taxi instructions to reduce the possibility of a runway incursion.

e. Taxiway and Run-up Restrictions.

(1) As much as possible, assign departure runways consistent with direction of flight to avoid crossing traffic.

(2) Direct aircraft requesting engine run-ups to the holding pads of runway 6/24 or direct them to taxi onto runway 1/19.

f. Intersection departures.

(1) Coordinate all intersection departures with Local Control and provide intersection departure aircraft with available takeoff distance from the assigned intersection.

CHAPTER 4. LOCAL CONTROL

a. Frequency

- (1)** Local Control will use frequency 120.300.
- (2)** The voice channel will be: **BDL_120.300**.
- b.** Local Control is authorized to provide services within the area extending 5 nautical miles (NM) from the Windsor Locks Airport, upwards from the surface to 3,000 feet, and on all active runways. These services include:
 - (1)** Separation between successive departures.
 - (2)** Separation between successive arrivals.
 - (3)** Separation between arrivals and departures.
 - (4)** Separation between overflights and other aircraft.
 - (5)** Utilization of visual separation as appropriate.
 - (6)** Issuance of visual approach clearances to arrivals (only within assigned airspace).

c. Runway selection.

- (1)** Except when extremely strong winds render it impossible, at least two runways shall be open at all times. This avoids the possibility of crossing traffic by allowing departures to depart more towards their route.
- (2)** When the wind is calm the active runways are 24 and 33. At all other times, use the two runways most aligned with the wind.
- (3)** All advertised runways may be used for arrivals and departures without further coordination with radar.
- (4)** Runway 1 may not be used for arrivals; runway 19 may not be used for departures.

d. Runway Changes.

- (1) Coordinate with all affected BDL/Y90 positions when weather forces a runway change to determine the optimal runways to open.
- (2) When one currently active runway will remain open after the change, minimize delay to traffic by using that runway exclusively while the runway change is in progress.

e. Departures.**(1) Releases**

- (a) All IFR aircraft that will land within Y90 airspace require a release from Radar before issuance of takeoff clearance. All others do not require a release.
- (b) Releases may be accomplished by verbal or textual coordination ("N213PD runway 6 to Hartford. Released, RE. DM").
- (c) Releases are valid for a period of three (3) minutes.

(2) Appropriate Handoff

- (a) If only Bristol Radar is online, all departures shall be handed off to Bristol Radar.
- (b) If Bristol Radar and West Radar are online, departures OR missed approaches off of runway 33 shall be handed off to West Radar.

(3) Departure Headings

- (a) LC shall assign all departures an initial heading within the Departure Corridor. The heading should turn the aircraft toward his flight planned route and avoid crossing traffic whenever possible. Assigned headings need not be coordinated with Radar.

Flow	Corridor
6/33	310° to 095°
24/33	220° to 350°
24/15	150° to 280°
6/15	360° to 150°
RWY 1	350° to 030°

Departure	RWY:Heading			
BDL(x)	24:RH	6:075°	33:RH	15:RH
CSTL(x)	24:180°	6:RH	33:220°	15:RH
DCT VEERS	24:280°	6:095°	33:RH	15:RH

- (b) The limits of the departure corridor are also displayed on the video map, depicted by a small "L" symbol at each corner.
- (c) VFR traffic that will receive radar service shall be assigned a heading in this range unless their on-course heading falls within the departure corridor, in which case the VFR may be cleared on course. VFR traffic that will not receive radar services may be cleared on course once clear of the Class Charlie airspace.

f. Arrival procedures.

- (1) All aircraft executing an unintentional missed approach shall be assigned to fly the runway heading and to climb and maintain 3,000 feet.
 - (a) Coordinate with the appropriate Radar sector and hand off the aircraft as soon as possible.
 - (b) Automatic releases are cancelled until otherwise advised by the Radar controller.
- (2) Practice Approaches
 - (a) Aircraft executing practice approaches shall be handed off to Radar no later than the missed approach point.
 - (b) Coordinate with the appropriate Radar sector to determine missed approach instructions to be issued to an aircraft conducting practice approaches.
 - (c) If no instructions are received before the aircraft reaches the missed approach point, handle the aircraft as an unintentional missed approach and coordinate with Radar.

g. Traffic patterns.

- (1) Generally, aircraft remaining in the pattern should not be assigned a discrete squawk code. This prevents Radar from mistakenly tracking the target, and prevents Conflict Alerts from going off.

CHAPTER 5. RADAR SECTORS

**BRISTOL RADAR (BR)
(BDL_APP)
Primary: 123.950**

a. Frequency

- (1)** Bristol Radar will use frequency 123.950.
- (2)** The voice channel will be: **Y90_123.950**.

b. Airspace.

- (1)** Bristol Radar is the primary radar if there is not a split between multiple Y90 radar controllers. See Appendix 1 & Appendix 3 if a split is in use.

c. Departures.

- (1)** All departures are handed off to Bristol Radar with the exception of departures off of runway 33. These shall be handed off to West Radar.
- (2)** All IFR departures from BDL will be assigned a heading within the departure corridor and climbing to at or below 4,000.
 - (a)** The limits of the departure corridor are displayed on the video map, depicted by a small "L" symbol at each corner.
- (3)** Departing aircraft shall be cleared on to their filed routing as soon as practicable.
- (4)** When appropriate, climb departing aircraft to 10,000 feet or lower assigned altitude.
- (5)** Initiate an automated handoff to the appropriate ZBW sector upon the departure being cleared on course and ensured free of traffic conflicts.
- (6)** Issue transfer of radio communications to the appropriate ZBW sector upon passing 6,000-7,000 feet or within 10NM of the airspace boundary, as appropriate
- (7)** Traffic permitting, the departure controller shall clear VFR aircraft to proceed on course and/or climb to their requested altitude

(a) "Proceed on course, climb to requested VFR altitude"

d. Arrivals.

- (1)** Bristol will establish all aircraft onto the approach sequence at BDL with the exception of arrivals onto runway 15.
- (2)** Do not take any action to establish approach sequence to runway 15 without coordination with West Radar. For example, do not instruct a BDL arrival to join the runway 15 localizer without coordination with West.
- (3)** Bristol Radar is also responsible for approaches at HFD. Ensure that arrival data is passed to HFD Tower if open.
- (4)** Aircraft assigned other than the primary runway (6 or 24, as appropriate) or other than the primary approach (ILS) may have this information displayed in their Scratch Pad.

e. Intrafacility Coordination.

- (1)** Transfer communications of runway 15 arrivals to West as soon as practical to allow them to be fit into the traffic flow. Do not retain a 15 arrival on frequency when no longer required.
- (2)** When running a scenario/flow in which an aircraft could conceivably enter West Radar's airspace during the approach procedure, reaction should be coordinated prior the start of the scenario/flow.
 - (a)** Example: If an aircraft is joining the ILS runway 6 from the south, misses the localizer and enters West airspace, a pointout shall be conducted.
 - (3)** When running a runway configuration in which an aircraft could conceivably enter West Radar's airspace during a missed approach/go-around, reaction should be coordinated prior to the start of this runway configuration.
 - (a)** Example: If an aircraft conducts a go-around while on the approach to runway 33, local control should assign this aircraft "maintain 3000, fly runway heading", then hand them off to WEST radar.

**WEST RADAR (WR)
(BDL_W_APP)
125.350**

a. Frequency

(1) West Radar will use frequency 125.350.

(2) The voice channel will be: **Y90_125.350**.

b. Airspace.

(1) See Appendix 3. Will essentially act as a north feeder sector.

c. Departures.

(1) West Radar is responsible for departure operations off of Runway 33.

(2) All other departure information can be reviewing under Bristol Radar departure information (Chapter 5, Section C).

d. Arrivals.

(1) West will establish aircraft onto the approach sequence for runway 15. All other approach sequences are under Bristol Radar's control.

(2) Do not take any action to establish approach sequence to any other runway without coordination with Bristol Radar. For example, do not instruct a BDL arrival to join the runway 24 localizer without coordination with Bristol.

(3) West Radar is also responsible for approaches at BAF, ORH, and CEF. Ensure that arrival data is passed to towers if open.

(4) Aircraft assigned other than the primary runway (6 or 24, as appropriate) or other than the primary approach (ILS) may have this information displayed in their Scratch Pad.

e. Intrafacility Coordination.

(1) Transfer communications of runway 24, 33, and 6 arrivals to Bristol as soon as practical to allow them to be fit into the traffic flow. Do not retain one of these arrival on frequency when no longer required.

- (2)** When running a runway configuration in which an aircraft could conceivably enter Bristol Radar's airspace during a missed approach/go-around, reaction should be coordinated prior to the start of this runway configuration.
 - (a)** Example: If an aircraft conducts a go-around while on the approach to runway 15, local control should assign this aircraft "maintain 3000, fly runway heading", then hand them off to BRISTOL radar.

CHAPTER 7. INTERFACILITY COORDINATION

A90 TRACON and Y90 TRACON

a. Y90 to A90.

- (1)** Traffic landing at A90 north satellites shall be routed via DREEM Direct or via HFD053.DREEM.BOS at 3,000 or 5,000.
- (2)** Jet traffic landing at KBOS or A90 south satellites shall be routed HFD V58 THUMB PVD KRANN(x) at 3,000 or 5,000
- (3)** Prop traffic landing at KBOS or A90 south satellites shall be routed via PUT PUT105 WOONS at 3,000 or 5,000
- (4)** A90 has control for turns and descent on traffic landing A90 satellites after DREEM, WOONS, or PVD.
- (5)** Y90 shall coordinate with A90 for approaches to 1B6 and for all aircraft conducting full approaches to ORH Runway 29.
 - (a)** When ORH Runway 29 arrivals are coordinated, A90 shall protect the PUMPP HPAS at and below 4,000.

b. A90 to Y90.

- (1)** Traffic inbound ORH shall be direct PUMPP or on a radar vector to the vicinity of PUMPP at or below 4,000. Y90 has control for turns and descents within five miles of the common border.
- (2)** Traffic routed over CTR or BAF may be cleared direct CTR or BAF (as appropriate) without coordination.
- (3)** Traffic landing BDL may be cleared direct BDL without coordination.
- (4)** Overflights shall be routed via GLYDE.V270/292 or BOSOX.V1/419 at 6,000, 8,000, or 10,000.

c. Control for Turns.

- (1)** Both A90 and Y90 shall have control for 30 degree turns “on contact.”

ALB ATCT and Y90 TRACON

a. Y90 to ALB.

- (1)** GBR and PSF arrivals shall be handed off level at 4,000. ALB has control for turns and descent west of V93.
- (2)** Traffic may be cleared direct to the first fix in ALB airspace.
- (3)** All traffic shall be routed via preferred TEC routes as much as practical.
- (4)** VFR aircraft may be handed off automatically without the need for verbal coordination.

b. ALB to Y90.

- (1)** Traffic may be cleared direct to the first fix in Y90 airspace.
- (2)** All traffic shall be routed via preferred TEC routes as much as practical.
- (3)** VFR aircraft may be handed off automatically without the need for verbal coordination.

c. Control for Turns.

- (1)** Both ALB and Y90 shall have control for 30 degree turns “on contact.”

N90 TRACON and Y90 TRACON**a. Y90 to N90.**

- (1) Traffic leaving Y90 to the west shall be routed via PWL at 4,000.
- (2) Traffic landing EWR shall be routed via HFD V229 SEALL V188 SAX at or below 10,000.
- (3) Traffic landing LGA shall be routed via HFD V1 MAD V475 at or below 10,000.
- (4) All traffic shall be routed via preferred TEC routes as much as practical.
- (5) VFR aircraft may be handed off automatically without the need for verbal coordination.

b. N90 to Y90.

- (1) Traffic entering Y90 from the west shall be routed via PWL at 5,000.
- (2) Traffic entering Y90 from the southwest shall be routed via airways to HFD.
- (3) N90 may clear overflight aircraft direct BDL without coordination.
- (4) All traffic shall be routed via preferred TEC routes as much as practical.
- (5) VFR aircraft may be handed off automatically without the need for verbal coordination.

c. Control for Turns.

- (1) Both N90 and Y90 shall have control for 30 degree turns “on contact.”

PVD ATCT and Y90 TRACON**a. Y90 to PVD.**

- (1) PVD satellite arrivals from ZBW through Y90 shall cross the Y90/PVD border level at or descending to 7,000.
- (2) Traffic may be cleared direct to the first fix in PVD airspace, excluding traffic routed via V14 to PUT.
- (3) All traffic shall be routed via preferred TEC routes as much as practical.
- (4) VFR aircraft may be handed off automatically without the need for verbal coordination.

b. PVD to Y90.

- (1) All traffic entering Y90 shall cross the Y90/PVD border at or below 8,000.
- (2) Traffic landing ORH shall enter Y90 airspace over PUT at or below 7,000.
- (3) All traffic shall be routed via preferred TEC routes as much as practical.
- (4) VFR aircraft may be handed off automatically without the need for verbal coordination.

c. Control for Turns.

- (1) Both PVD and Y90 shall have control for descent (not below 5,000) and 30 degree turns either side of track "on contact."

ZBW ARTCC and Y90 TRACON**a. ZBW to Y90.**

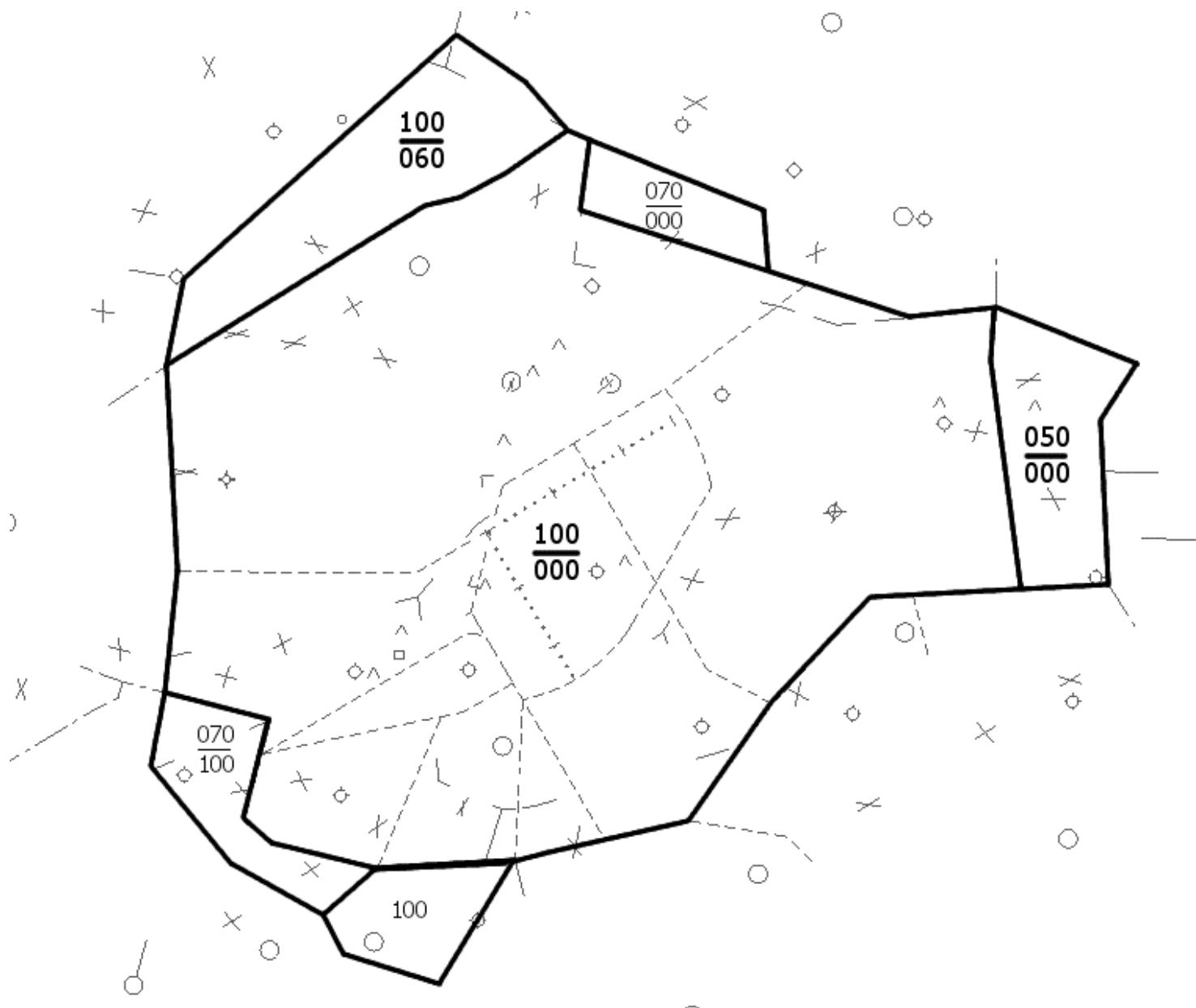
- (1) Traffic routed via the STELA STAR shall cross STELA at 11,000.
- (2) Traffic routed via the DPK STAR shall cross MAD at 11,000.
- (3) Y90 arrivals from the east or southeast shall cross 35 NM west of BDL at 11,000.
- (4) Y90 arrivals from the northeast shall be routed via GDM.V229.WITNY or EEN DIRECT, and shall enter Y90 airspace at or above 4,000.
- (5) Y90 arrivals from the west (over N90 airspace) shall enter Y90 level at 7,000 or 9,000.
- (6) GON area arrivals through Y90 shall cross 30 NM northwest of GON at 11,000.

b. Y90 to ZBW.

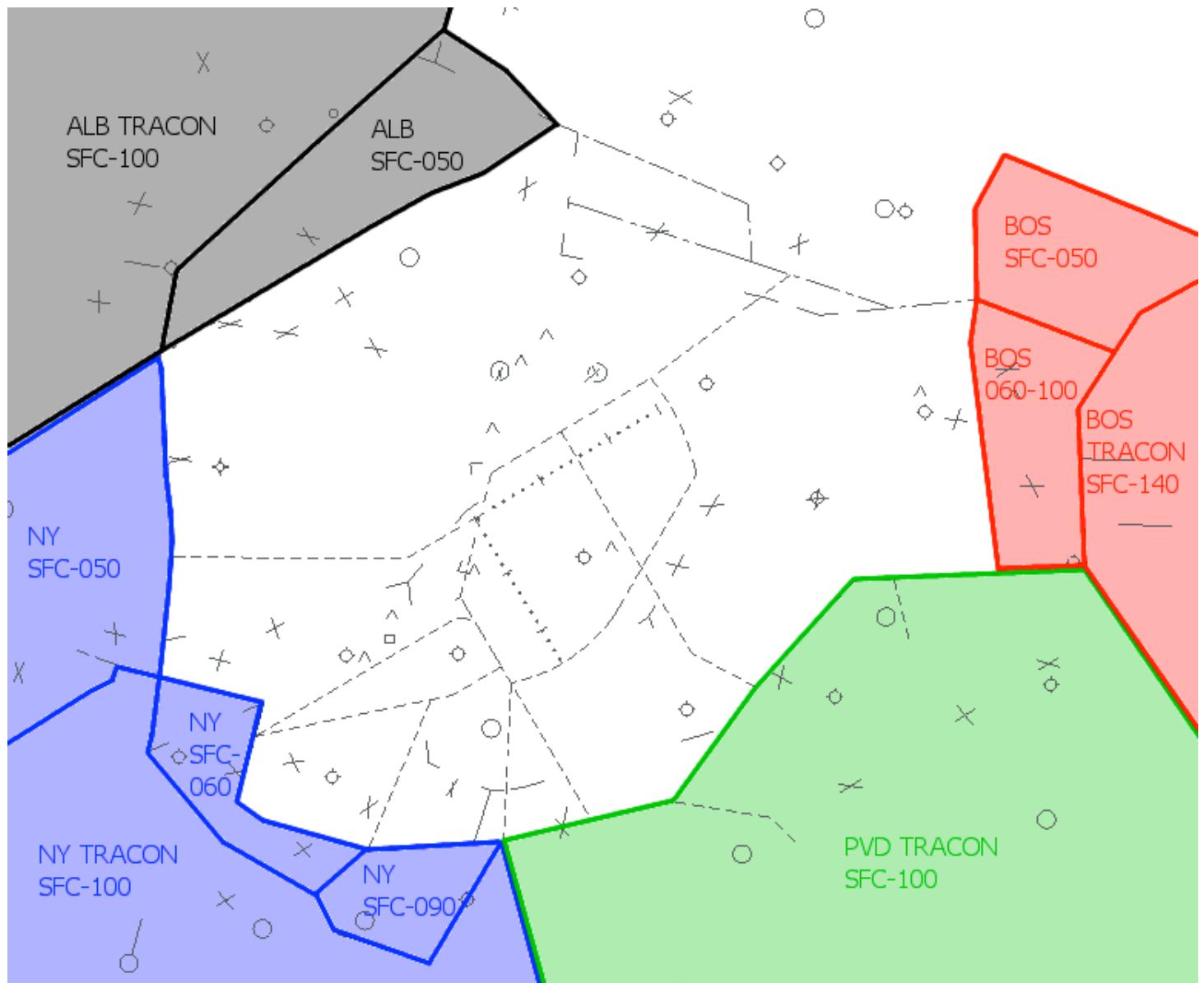
- (1) Y90 shall clear all departures on course and issue a climb to 10,000 or lower cruise altitude before transferring communications to ZBW.
- (2) Y90 shall ensure that aircraft on the same route are handed off to Center with no less than 10 NM “in-trail” spacing.
- (3) Clear all arrivals landing Manchester (MHT) via EEN MHT at or below 10,000.
- (4) Clear all arrivals landing Kennedy Int'l (JFK) via ORW V16 DPK at or below 10,000.
- (5) Clear all arrivals landing Newark Int'l (EWR) via HFD V229 SEALL V188 SAX at or below 10,000.
- (6) Clear all arrivals landing La Guardia (LGA) via HFD V1 MAD V475 at or below 10,000.
- (7) Clear all arrivals landing Islip (ISP) via ORW V16 CCC at or below 10,000.

CHAPTER 8. APPENDICES

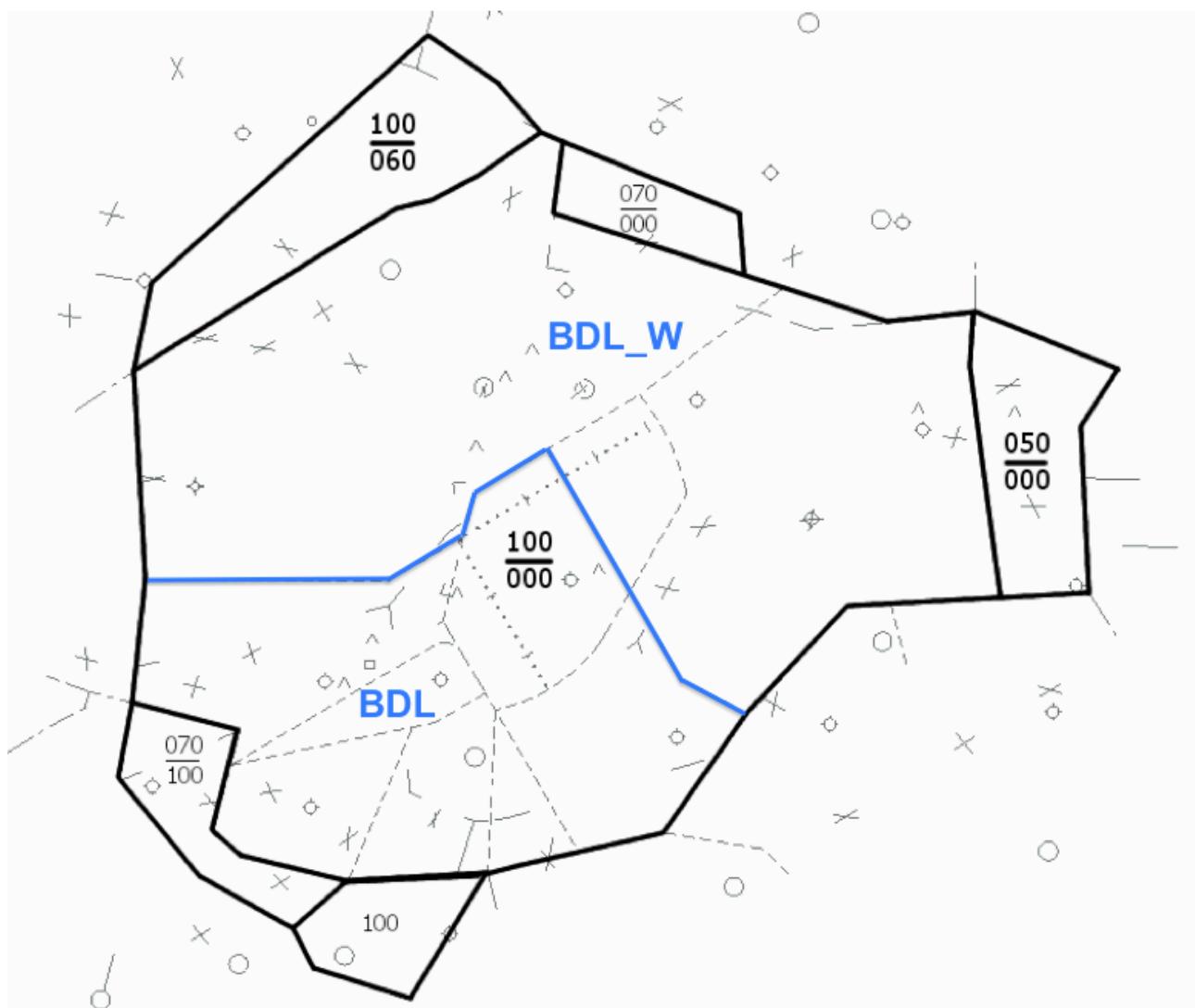
APPENDIX 1. TRACON AIRSPACE



APPENDIX 2. ADJACENT FACILITIES

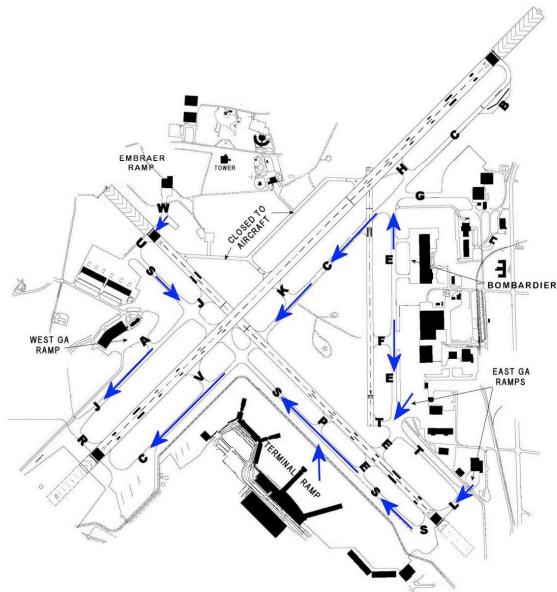


APPENDIX 3. WEST RADAR AIRSPACE



APPENDIX 4. PREFERRED TAXI ROUTES

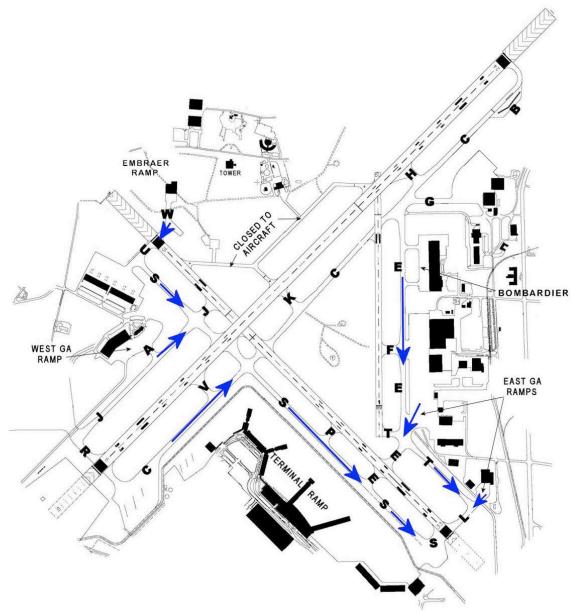
**BRADLEY INTERNATIONAL AIRPORT
PREFERRED TAXI ROUTES TO RUNWAY 6**



TO RUNWAY 6:

- From Bombardier Ramp: Taxiway ECHO, then Taxiway CHARLIE; *OR* Taxiway ECHO, then Taxiway SIERRA, then Taxiway CHARLIE
- From East GA Ramps: Taxiway ECHO, then Taxiway SIERRA, then Taxiway CHARLIE; *OR* Taxiway LIMA, then Taxiway SIERRA, then Taxiway CHARLIE
- From Embraer Ramp: Taxiway WHISKEY, then Taxiway UNIFORM, then Taxiway SIERRA, then Taxiway JULIET, then Taxiway ROMEO
- From Terminal Ramp: Taxiway CHARLIE; *OR* Taxiway SIERRA, then Taxiway CHARLIE
- From West Cargo Ramp: Taxiway SIERRA, then Taxiway JULIET, then Taxiway ROMEO
- From West GA Ramp: Taxiway ALPHA, then Taxiway JULIET, then Taxiway ROMEO

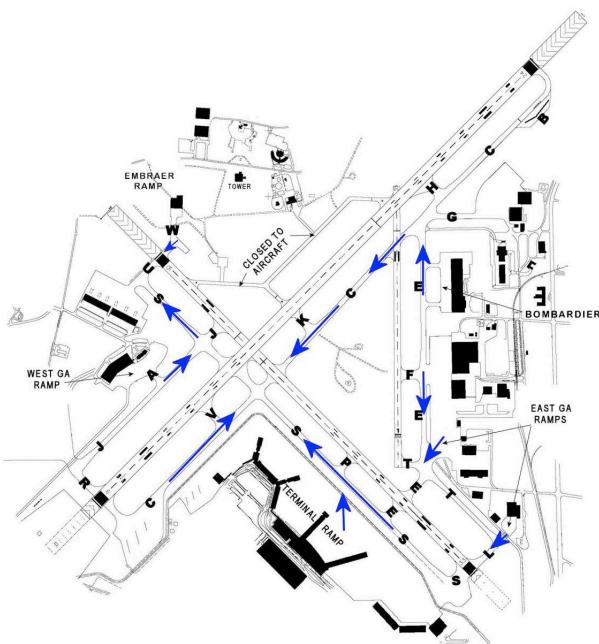
**BRADLEY INTERNATIONAL AIRPORT
PREFERRED TAXI ROUTES TO RUNWAY 33**



TO RUNWAY 33:

- From Bombardier Ramp: Taxiway ECHO, then Taxiway TANGO, then Taxiway LIMA
- From East GA Ramps: Taxiway ECHO, then Taxiway TANGO, then Taxiway LIMA; *OR* Taxiway LIMA
- From Embraer Ramp: Taxiway WHISKEY then Taxiway UNIFORM, then Taxiway SIERRA
- From Terminal Ramp: Taxiway SIERRA; *OR* Taxiway CHARLIE, then Taxiway SIERRA
- From West Cargo Ramp: Taxiway SIERRA
- From West GA Ramp: Taxiway ALPHA, then Taxiway JULIET, then Taxiway SIERRA

**BRADLEY INTERNATIONAL AIRPORT
PREFERRED TAXI ROUTE RUNWAY 15**



**BRADLEY INTERNATIONAL AIRPORT
PREFERRED TAXI ROUTE RUNWAY 24**

