

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)  
TITLE 14 CFR PART 97.37**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<b>CITY, STATE</b>	<b>AIRPORT</b>	<b>EFFECTIVE DATE</b>	<b>AMDT NO</b>
WINDSOR LOCKS, CT	BRADLEY INTL	20 JUNE 2019	4

**TAKEOFF MINIMUMS:**

**RWY 19, NA - ENVIRONMENTAL.**

**RWY 1, 6, 15, 24, STANDARD.**

**RWY 33, STANDARD WITH MINIMUM CLIMB OF 340 FT PER NM TO 1000 OR 1200-3 FOR VCOA.**

**TEXTUAL DEPARTURE PROCEDURES:**

**RWY 1: CLIMB HEADING 013.04 TO 900 BEFORE TURNING LEFT.**

**VISUAL CLIMB OVER AIRPORT:**

**RWY 33: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS BRADLEY INTL AIRPORT AT OR ABOVE 1200 BEFORE PROCEEDING ON COURSE.**

**TAKEOFF OBSTACLE NOTES:**

**NOTE: RWY 1:** LIGHTING 10 FT FROM DER, 40 FT RIGHT OF CENTERLINE, 2 FT AGL/171 FT MSL.  
TREE 670 FT FROM DER, 624 FT LEFT OF CENTERLINE, 234 FT MSL.  
TREES BEGINNING 852 FT FROM DER, 399 FT LEFT OF CENTERLINE, UP TO 54 FT AGL/237 FT MSL.  
TREES BEGINNING 995 FT FROM DER, 393 FT LEFT OF CENTERLINE, UP TO 239 FT MSL.  
TREES BEGINNING 1154 FT FROM DER, 312 FT LEFT OF CENTERLINE, UP TO 244 FT MSL.  
TREES BEGINNING 1378 FT FROM DER, 182 FT LEFT OF CENTERLINE, UP TO 249 FT MSL.  
POLE AND TREE BEGINNING 1388 FT FROM DER, 382 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/219 FT MSL.  
TREES BEGINNING 1735 FT FROM DER, 35 FT LEFT OF CENTERLINE, UP TO 257 FT MSL.  
TREES BEGINNING 1844 FT FROM DER, 47 FT RIGHT OF CENTERLINE, UP TO 246 FT MSL.  
TREES BEGINNING 2080 FT FROM DER, 81 FT LEFT OF CENTERLINE, UP TO 266 FT MSL.  
TREES BEGINNING 2142 FT FROM DER, 56 FT RIGHT OF CENTERLINE, UP TO 64 FT AGL/276 FT MSL.  
TREES BEGINNING 2211 FT FROM DER, 20 FT RIGHT OF CENTERLINE, UP TO 278 FT MSL.  
TREES BEGINNING 2543 FT FROM DER, 41 FT LEFT OF CENTERLINE, UP TO 268 FT MSL.

**NOTE: RWY 6:** LIGHTING 9 FT FROM DER, 9 FT RIGHT OF CENTERLINE, 2 FT AGL/163 FT MSL.  
TREE 20 FT FROM DER, 464 FT LEFT OF CENTERLINE, 27 FT AGL/184 FT MSL.  
TREES BEGINNING 70 FT FROM DER, 494 FT LEFT OF CENTERLINE, UP TO 198 FT MSL.  
TREES BEGINNING 1227 FT FROM DER, 730 FT LEFT OF CENTERLINE, UP TO 230 FT MSL.  
TREE 1956 FT FROM DER, 920 FT RIGHT OF CENTERLINE, 78 FT AGL/231 FT MSL.  
TREES BEGINNING 1969 FT FROM DER, 30 FT RIGHT OF CENTERLINE, UP TO 245 FT MSL.

**NOTE: RWY 15:** LIGHTING 3 FT FROM DER, 5 FT LEFT OF CENTERLINE, 2 FT AGL/170 FT MSL.  
TERRAIN 7 FT FROM DER, 7 FT RIGHT OF CENTERLINE, 169 FT MSL.  
BUILDING 1413 FT FROM DER, 740 FT RIGHT OF CENTERLINE, 38 FT AGL/204 FT MSL.  
TREE 1520 FT FROM DER, 897 FT RIGHT OF CENTERLINE, 49 FT AGL/219 FT MSL.  
TREES BEGINNING 2336 FT FROM DER, 743 FT LEFT OF CENTERLINE, UP TO 49 FT AGL/246 FT MSL.  
TREES BEGINNING 2864 FT FROM DER, 884 FT LEFT OF CENTERLINE, UP TO 251 FT MSL.

**NOTE: RWY 24:** LIGHTING 2 FT FROM DER, 4 FT LEFT OF CENTERLINE, 2 FT AGL/174 FT MSL.  
FENCE AND POLE BEGINNING 1239 FT FROM DER, 773 FT LEFT OF CENTERLINE, UP TO 36 FT AGL/215 FT MSL.  
TREE 1945 FT FROM DER, 978 FT RIGHT OF CENTERLINE, 237 FT MSL.  
TREES BEGINNING 2024 FT FROM DER, 912 FT RIGHT OF CENTERLINE, UP TO 244 FT MSL.  
TREE 3389 FT FROM DER, 598 FT LEFT OF CENTERLINE, 70 FT AGL/258 FT MSL.  
TREE 3456 FT FROM DER, 1085 FT LEFT OF CENTERLINE, 276 FT MSL.  
TREES BEGINNING 3542 FT FROM DER, 619 FT LEFT OF CENTERLINE, UP TO 277 FT MSL.  
TREE 3705 FT FROM DER, 490 FT RIGHT OF CENTERLINE, 71 FT AGL/270 FT MSL.  
TREES BEGINNING 3751 FT FROM DER, 380 FT RIGHT OF CENTERLINE, UP TO 83 FT AGL/285 FT MSL.  
TREES BEGINNING 4014 FT FROM DER, 441 FT RIGHT OF CENTERLINE, UP TO 286 FT MSL.  
TREE 4161 FT FROM DER, 894 FT RIGHT OF CENTERLINE, 288 FT MSL.  
TREE 4223 FT FROM DER, 335 FT LEFT OF CENTERLINE, 282 FT MSL.  
TREES BEGINNING 4251 FT FROM DER, 196 FT RIGHT OF CENTERLINE, UP TO 290 FT MSL.  
TREE 4308 FT FROM DER, 491 FT LEFT OF CENTERLINE, 291 FT MSL.  
TREE 4804 FT FROM DER, 75 FT LEFT OF CENTERLINE, 295 FT MSL.

QUALITY  
3  
CHECKED

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)  
TITLE 14 CFR PART 97.37**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<b>CITY, STATE</b>	<b>AIRPORT</b>	<b>EFFECTIVE DATE</b>	<b>AMDT NO</b>
WINDSOR LOCKS, CT	BRADLEY INTL	20 JUNE 2019	4

**NOTE: RWY 33:** LIGHTING 3 FT FROM DER, 55 FT RIGHT OF CENTERLINE, 2 FT AGL/170 FT MSL.  
LIGHTING 4 FT FROM DER, 54 FT LEFT OF CENTERLINE, 2 FT AGL/170 FT MSL.  
TREES BEGINNING 1098 FT FROM DER, 581 FT RIGHT OF CENTERLINE, UP TO 231 FT MSL.  
TREE 1271 FT FROM DER, 651 FT LEFT OF CENTERLINE, 219 FT MSL.  
TREE 1403 FT FROM DER, 783 FT RIGHT OF CENTERLINE, 235 FT MSL.  
TREES BEGINNING 1404 FT FROM DER, 546 FT LEFT OF CENTERLINE, UP TO 229 FT MSL.  
TREES BEGINNING 1583 FT FROM DER, 34 FT LEFT OF CENTERLINE, UP TO 240 FT MSL.  
TREES BEGINNING 1624 FT FROM DER, 457 FT RIGHT OF CENTERLINE, UP TO 55 FT AGL/254 FT MSL.  
TREES BEGINNING 1883 FT FROM DER, 477 FT LEFT OF CENTERLINE, UP TO 247 FT MSL.  
TREES BEGINNING 1924 FT FROM DER, 41 FT RIGHT OF CENTERLINE, UP TO 262 FT MSL.  
TREE 2159 FT FROM DER, 852 FT LEFT OF CENTERLINE, 254 FT MSL.  
TREES BEGINNING 2205 FT FROM DER, 48 FT LEFT OF CENTERLINE, UP TO 68 FT AGL/260 FT MSL.  
TREES BEGINNING 2420 FT FROM DER, 97 FT LEFT OF CENTERLINE, UP TO 261 FT MSL.  
TREE 3069 FT FROM DER, 824 FT LEFT OF CENTERLINE, 262 FT MSL.  
TREES BEGINNING 3129 FT FROM DER, 218 FT RIGHT OF CENTERLINE, UP TO 93 FT AGL/264 FT MSL.  
TREES BEGINNING 3306 FT FROM DER, 652 FT LEFT OF CENTERLINE, UP TO 263 FT MSL.  
TREES BEGINNING 3439 FT FROM DER, 124 FT RIGHT OF CENTERLINE, UP TO 108 FT AGL/272 FT MSL.  
TREES BEGINNING 2 NM FROM DER, 3419 FT LEFT OF CENTERLINE, UP TO 565 FT MSL.  
TREES BEGINNING 2.1 NM FROM DER, 2696 FT LEFT OF CENTERLINE, UP TO 640 FT MSL.  
TREES BEGINNING 2.2 NM FROM DER, 2911 FT LEFT OF CENTERLINE, UP TO 683 FT MSL.  
ANTENNA AND TREES BEGINNING 2.3 NM FROM DER, 1806 FT LEFT OF CENTERLINE, UP TO 94 FT AGL/756 FT MSL.  
ANTENNA 2.3 NM FROM DER, 3521 FT LEFT OF CENTERLINE, 74 FT AGL/773 FT MSL.  
TOWER AND TREES BEGINNING 2.3 NM FROM DER, 535 FT LEFT OF CENTERLINE, UP TO 152 FT AGL/774 FT MSL.

**CONTROLLING OBSTACLES:**

**RWY 33:** 747 FT MSL ANTENNA 415736.64N/0724422.38W (CLIMB GRADIENT). 774 FT MSL TOWER 415748.32N/0724426.23W (CLIMB-TO ALTITUDE).

**RWY 33 (VCOA):** 783 FT MSL TREE 415814.31N/0724424.10W (VCA). 909 FT MSL AAO 415941.80N/0724401.60W (DIVERSE).

**OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:**

**RWY 1:** 909 FT MSL AAO 415941.80N/0724401.60W.



**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)  
TITLE 14 CFR PART 97.37**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
WINDSOR LOCKS, CT	BRADLEY INTL	20 JUNE 2019	4

**REMARKS:**

1. TAKEOFF RWY 19 NA PER AIRPORT MANAGEMENT REQUEST (SEE REMARKS IN AIRPORT CHART SUPPLEMENT ENTRY).
2. RWY 33 CLIMB GRADIENT ROUNDED TO 340 FT PER NM FOR PUBLICATION (COMPUTED VALUE 335.94 FT PER NM).
3. PRECIPITOUS TERRAIN EVALUATION COMPLETED IN VISUAL CLIMB AREA, NO ADJUSTMENTS REQUIRED.

**FLIGHT INSPECTED BY:**

DURLEY J FELDER  
*Digitally signed by*  
**JACOB POWERS**  
Feb 27, 2019

**OFFICE SYMBOL:**

FICO

**DATE:**

2/22/19

**DEVELOPED BY:**

PETER GUIMOND  
*Digitally signed by*  
**PETER R GUIMOND**  
Nov 20, 2018

**OFFICE SYMBOL:**

AJV-5442

**DATE:**

11/20/2018

**APPROVED BY:**

MARLON ROBINSON  
*Digitally signed by*  
**JACOB POWERS**  
Feb 27, 2019

**OFFICE SYMBOL:**

AJV-5440

**DATE:**

**REQUIRED EFFECTIVE DATE:**

ROUTINE

**COORDINATED WITH:**

<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**OTHER:**

ZBW, BDL APP CON, BDL ATCT, AMGR.

**CHANGES - REASONS:**

1. AMENDED RWY 19 TAKEOFF MINIMUMS FROM NA TO NA - ENVIRONMENTAL - REASON PROVIDED IN ACCORDANCE WITH FAAO 8260.46F, APPENDIX D, PARA 6A.
2. AMENDED RWY 33 TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 326 FT PER NM TO 1000 OR 1200-2 1/2 FOR CLIMB IN VISUAL CONDITIONS TO STANDARD WITH MINIMUM CLIMB OF 340 FT PER NM TO 1000 OR 1200-3 FOR VCOA - NEW OBSTACLE STUDY. MINIMUM VCOA VISIBILITY IS NOW 3 SM PER FAAO 8260.3D, PARA 14-4-4A.
3. AMENDED RWY 1 TEXTUAL DEPARTURE PROCEDURE FROM CLIMB HEADING 013.04 TO 1000 BEFORE TURNING LEFT TO READ CLIMB HEADING 013.04 TO 900 BEFORE TURNING LEFT - NEW OBSTACLE STUDY.
4. DELETED RWY 33 TEXTUAL DEPARTURE PROCEDURE - NOT REQUIRED, PUBLISHED CLIMB GRADIENT MITIGATES ALL 40:1 PENETRATIONS.
5. MOVED RWY 33 VCOA INSTRUCTIONS TO VISUAL CLIMB OVER AIRPORT BLOCK - IN ACCORDANCE WITH FAAO 8260.46F, APPENDIX D, PARA 8.
6. AMENDED TAKEOFF OBSTACLE NOTES FOR ALL AUTHORIZED RUNWAYS - GROUPED AND FORMATTED IN ACCORDANCE WITH DEPARTURE OBSTACLES GROUPER SOP (1.0).
7. ADDED OBSTACLE MANDATING ODP ROUTE DEVELOPMENT FOR RWY 1 - IN ACCORDANCE WITH FAAO 8260.46F, APPENDIX D, PARA 10C.
8. ADDED RWY 33 CONTROLLING OBSTACLE FOR CLIMB GRADIENT 747 FT MSL ANTENNA - NEW OBSTACLE STUDY.
9. AMENDED VCOA CONTROLLING OBSTACLES FROM 777 FT MSL TREE AND 859 FT MSL AAO TO 783 FT MSL TREE AND 909 FT MSL AAO - NEW OBSTACLE STUDY.

QUALITY  
3  
CHECKED