

U.S. DEPARTMENT OF TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION  
**TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)**

Bearings, headings, courses, tracks and radials are magnetic. Elevation 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.

City, State	Airport	Effective Date	Amdt. No.
BLOOMSBURG, PA	BLOOMSBURG MUNI	28 APRIL 2016	2

**TAKEOFF MINIMUMS:**

**RWY 9**, STANDARD WITH MINIMUM CLIMB OF 660 FT PER NM TO 1400 OR 2100-3 FOR VCOA.

**RWY 27**, STANDARD WITH MINIMUM CLIMB OF 300 FT PER NM TO 1400 OR 2100-3 FOR VCOA.

**TEXTUAL DEPARTURE PROCEDURES:**

**RWY 9:** CLIMBING LEFT TURN HEADING 058.74 TO 2200 BEFORE PROCEEDING ON COURSE. DO NOT EXCEED 180 KIAS UNTIL ESTABLISHED ON 058.74 HEADING.

**RWY 27:** CLIMB HEADING 253.75 TO 2200 BEFORE PROCEEDING ON COURSE.

**VISUAL CLIMB OVER AIRPORT:**

**ALL RUNWAYS:** OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS BLOOMSBURG MUNI AIRPORT AT OR ABOVE 2400 BEFORE PROCEEDING ON COURSE.

**TAKEOFF OBSTACLE NOTES:**

**NOTE: RWY 9**, TREES BEGINNING 51 FT FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 642 FT MSL. TREES BEGINNING 475 FT FROM DER, 24 FT LEFT OF CENTERLINE, UP TO 599 FT MSL. GRD 64 FT FROM DER, 34 FT RIGHT OF CENTERLINE, 487 FT MSL. VEHICLE ON ROAD 176 FT FROM DER, 112 FT RIGHT OF CENTERLINE, 15 FT AGL/488 FT MSL. POLES BEGINNING 191 FT FROM DER, 432 FT LEFT OF CENTERLINE, UP TO 44 FT AGL/528 FT MSL. BLDG 335 FT FROM DER, 568 LEFT OF CENTERLINE, 501 FT MSL. PARKING LOTS BEGINNING 629 FT FROM DER, 652 FT LEFT OF CENTERLINE, UP TO 503 FT MSL. TERRAIN 1503 FT FROM DER, 164 FT RIGHT OF CENTERLINE, 524 FT MSL.

**NOTE: RWY 27**, TOWER 4520 FT FROM DER, 596 FT RIGHT OF CENTERLINE, 150 FT AGL/ 632 FT MSL. BLDGS BEGINNING 35 FT FROM DER, 327 FT LEFT OF CENTERLINE, UP TO 506 FT MSL. VEHICLES IN PARKING LOTS BEGINNING 48 FT FROM DER, 238 FT RIGHT OF CENTERLINE, UP TO 496 FT MSL. POLE 151 FT FROM DER, 238 FT RIGHT OF CENTERLINE, 8 FT AGL/ 499 FT MSL. POLES BEGINNING 210 FT FROM DER, 493 FT LEFT OF CENTERLINE, UP TO 521 FT MSL. VEHICLE ON RD 279 FT FROM DER, 210 FT RIGHT OF CENTERLINE, 15 FT AGL/ 494 FT MSL. TREES BEGINNING 50 FT FROM DER, 50 FT LEFT OF CENTERLINE, UP TO 579 FT MSL. TREES BEGINNING 559 FT FROM DER, 96 FT RIGHT OF CENTERLINE, UP TO 566 FT MSL. STACK 5202 FT FROM DER, 660 FT RIGHT OF CENTERLINE, 175 FT AGL/ 661 FT MSL. CHIMNEY/SMOKESTACK 5199 FT FROM DER, 661 FT RIGHT OF CENTERLINE, 659 FT MSL.

**CONTROLLING OBSTACLES:**

**RWY 9:** 1095 FT MSL TOWER 410000.87N/ 0762409.30W (CLIMB GRADIENT), 1113 FT MSL TREE 405949.69N/0762428.21W (CLIMB GRADIENT TERMINATION).

**RWY 27:** 648 FT MSL TWR 405943.41N/0762726.32W (CLIMB GRADIENT).

**RWY 9/27 (VCOA):** 2064 FT MSL AAO 405621.00N/0762533.00W (VCA).

**OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:**

**RWY 9** – 1113 FT MSL TREE 405949.69N/0762428.21W. 2064 FT MSL AAO 405621.00N/0762533.00W.

**RWY 27** -- 1597 FT MSL TOWER 405912.29N/0763246.72W. 1312 FT MSL POWER TRANSMISSION TWR 405942.58N/0763026.84W.



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**REMARKS:**

REVIEW BY AFS-460 RESULTED IN A HIGHER CLIMB GRADIENT FOR RUNWAY 9 THAN WAS ORIGINALLY SUBMITTED. BASED ON THEIR ANALYSIS, CLIMB GRADIENT WAS CHANGED TO 660 FT PER NM TO 1400.

*Digitally signed by*

**FLIGHT INSPECTED BY: JULIE A MORGAN**

**REQUIRED EFFECTIVE DATE:**

KENNETH E JACK <sup>Aug 04, 2015</sup> FICO

02/10/2015

ROUTINE

**DEVELOPED BY:**

GEORGE H TRAMMELL <sup>Aug 04, 2015</sup> *Digitally signed by* AJV-352

10/28/2014

**APPROVED BY: JULIE A MORGAN**

SUSAN CRUMB <sup>Aug 04, 2015</sup> *Digitally signed by* AJV-352

**JULIE A MORGAN**

**COORDINATED WITH:** Aug 04, 2015

ALPA, AOPA, NBAA, ZNY, ARPT MGR

**CHANGES:**

1. RWY 9 TAKEOFF MINIMUMS CHANGED FROM: 700-1 ½ OR STANDARD WITH MINIMUM CLIMB OF 460 FT PER NM TO 1000. TO: STANDARD WITH MINIMUM CLIMB OF 660 FT PER NM TO 1400 OR 2100-3 FOR VCOA.
2. RWY 27 TAKEOFF MINIMUMS CHANGED FROM: 400-2 ¼ OR STANDARD WITH MINIMUM CLIMB OF 300 FT PER NM TO 1000. TO: STANDARD WITH MINIMUM CLIMB OF 300 FT PER NM TO 1400 OR 2100-3 FOR VCOA.
3. RWY 9 DEPARTURE PROCEDURE CHANGED FROM: CLIMB HEADING 066.75 TO 2200 BEFORE PROCEEDING ON COURSE. TO: CLIMBING LEFT TURN HEADING 058.74 TO 2200 BEFORE PROCEEDING ON COURSE. DO NOT EXCEED 180 KIAS UNTIL ESTABLISHED ON 058.74 HEADING.
4. RWY 27 DEPARTURE PROCEDURE CHANGED FROM: CLIMB HEADING 249.74 TO 2200 BEFORE PROCEEDING ON COURSE. TO: CLIMB HEADING 253.75 TO 2200 BEFORE PROCEEDING ON COURSE.
5. ADDED VCOA TO VISUAL CLIMB OVER AIRPORT BLOCK AND FORMATTED ATC APPROVAL WORDING.
6. AMENDED CONTROLLING OBSTACLES AND OBSTACLES MANDATING ODP ROUTE DEVELOPMENT FOR ALL RWYS.
7. AMENDED TAKEOFF OBSTACLE NOTES FOR ALL RWYS.

**REASONS:**

1. 8260.46E, TABLE 2-1-1 ODP DEVELOPMENT COMBINATIONS / FLOWCHART. RWY 9 LENGTHENED AND TURNED 4 DEGREES TOWARD NEW SURVEYED OBSTACLES. ICA TREE KN13T000900 1113 MSL REQUIRES 858 FT PER NM CLIMB GRADIENT. SEVERAL OTHER OBSTACLES REQUIRE 800 FT PER NM CLIMB GRADIENT. ROUTE DEVELOPED TO REDUCE CLIMB GRADIENT. 660 FT PER NM CLIMB GRADIENT AND 180 KIAS SPEED RESTRICTION USED TO SHORTEN ICA AND TIGHTEN TURN AWAY FROM OBSTACLES. VCOA ADDED PER TABLE.
2. 8260.46E, TABLE 2-1-1 ODP DEVELOPMENT COMBINATIONS/ FLOWCHART. OBSTACLE 42-002379 1597 MSL TOWER REQUIRES ROUTE DEVELOPMENT AND 648 FT MSL TWR REQUIRE CLIMB GRADIENT. VCOA ADDED PER TABLE. 3,4. ROUTES DEVELOPED TO REDUCE CLIMB GRADIENT, MAGVAR CHANGE FROM 9W TO 12W. 5,6,7. NEW OBSTACLE STUDY WITH NEW SURVEYED OBSTACLES.
- 3, 4. ROUTES DEVELOPED TO REDUCE CLIMB GRADIENT.
- 5, 6, 7. NEW OBSTACLE STUDY WITH NEW SURVEYED OBSTACLES.

7/27/2015: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 10/28/2014.

1. CHANGED CLIMB GRADIENT FROM 620 TO 660 FT PER NM TO 1400, PER AFS-460.

QUALITY  
3  
CHECKED