

**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>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>	<u>AMDT NO</u>	<u>ACTUAL EFFECTIVE DATE</u>
KMHK	MANHATTAN	KS	8	08/10/2023

TAKEOFF MINIMUMS:

RWY 21: STANDARD.

RWY 3: 400-2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 289 FT/NM TO 1500.

RWY 13: 300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 219 FT/NM TO 1300.

RWY 31: 300-2 OR STANDARD WITH MINIMUM CLIMB OF 298 FT/NM TO 1500, OR 1000-3 FOR VCOA.

TEXTUAL DEPARTURE PROCEDURES:

ALL RUNWAYS - WESTBOUND DEPARTURES HEADING 210 THROUGH 360 NA.

RWY 03: CLIMB ON HEADING 035.91 TO 1700 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

RWY 31: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS MANHATTAN RGNL AIRPORT AT OR ABOVE 1800 BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 3: TREE 885 FT FROM DER, 122 FT RIGHT OF CENTERLINE, 29 FT AGL/1069 FT MSL.
TREE 887 FT FROM DER, 53 FT RIGHT OF CENTERLINE, 26 FT AGL/1071 FT MSL.
TREES BEGINNING 888 FT FROM DER, 20 FT RIGHT OF CENTERLINE, UP TO 32 FT AGL/1076 FT MSL.
TREE 905 FT FROM DER, 99 FT RIGHT OF CENTERLINE, 40 FT AGL/1080 FT MSL.
TREES BEGINNING 916 FT FROM DER, 41 FT RIGHT OF CENTERLINE, UP TO 42 FT AGL/1082 FT MSL.
TREE 920 FT FROM DER, 37 FT LEFT OF CENTERLINE, 28 FT AGL/1071 FT MSL.
TREES BEGINNING 921 FT FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 44 FT AGL/1084 FT MSL.
TREE 936 FT FROM DER, 114 FT LEFT OF CENTERLINE, 33 FT AGL/1075 FT MSL.
TREES BEGINNING 937 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 36 FT AGL/1078 FT MSL.
TREES BEGINNING 953 FT FROM DER, 200 FT LEFT OF CENTERLINE, UP TO 34 FT AGL/1079 FT MSL.
TREES BEGINNING 958 FT FROM DER, 27 FT LEFT OF CENTERLINE, UP TO 46 FT AGL/1086 FT MSL.
TREES BEGINNING 1561 FT FROM DER, 230 FT RIGHT OF CENTERLINE, UP TO 55 FT AGL/1095 FT MSL.
TREES BEGINNING 1666 FT FROM DER, 83 FT RIGHT OF CENTERLINE, UP TO 67 FT AGL/1108 FT MSL.
TREES BEGINNING 1807 FT FROM DER, 17 FT RIGHT OF CENTERLINE, UP TO 73 FT AGL/1114 FT MSL.
TREES BEGINNING 1820 FT FROM DER, 710 FT LEFT OF CENTERLINE, UP TO 1109 FT MSL.
TREES BEGINNING 1922 FT FROM DER, 45 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/1118 FT MSL.
TREE 2418 FT FROM DER, 764 FT RIGHT OF CENTERLINE, 77 FT AGL/1119 FT MSL.
TREES, TERRAIN BEGINNING 1.1 NM FROM DER, 1573 FT LEFT OF CENTERLINE, UP TO 23 FT AGL/1235 FT MSL.
TREES, BUILDING BEGINNING 1.2 NM FROM DER, 1183 FT LEFT OF CENTERLINE, UP TO 37 FT AGL/1305 FT MSL.
TREES BEGINNING 1.6 NM FROM DER, 2230 FT LEFT OF CENTERLINE, UP TO 45 FT AGL/1319 FT MSL.
TANK 2.1 NM FROM DER, 3846 FT RIGHT OF CENTERLINE, 191 FT AGL/1421 FT MSL.

NOTE: RWY 13: POLE, BUILDING, ELECTRICAL SYSTEM BEGINNING 32 FT FROM DER, 439 FT LEFT OF CENTERLINE, UP TO 43 FT AGL/1086 FT MSL.

VEHICLE ON ROADWAY 904 FT FROM DER, 614 FT RIGHT OF CENTERLINE, 1068 FT MSL.
TREE 1303 FT FROM DER, 794 FT LEFT OF CENTERLINE, 1134 FT MSL.
TREES BEGINNING 1606 FT FROM DER, 582 FT LEFT OF CENTERLINE, UP TO 1138 FT MSL.
TREE 2685 FT FROM DER, 1028 FT RIGHT OF CENTERLINE, 1114 FT MSL.
TREE 5517 FT FROM DER, 1396 FT LEFT OF CENTERLINE, 1186 FT MSL.
TERRAIN 1 NM FROM DER, 238 FT LEFT OF CENTERLINE, 1207 FT MSL.
TREE 1.1 NM FROM DER, 709 FT LEFT OF CENTERLINE, 1229 FT MSL.
TREE 1.1 NM FROM DER, 186 FT RIGHT OF CENTERLINE, 1221 FT MSL.
TOWER 1.4 NM FROM DER, 2267 FT RIGHT OF CENTERLINE, 59 FT AGL/1261 FT MSL.

NOTE: RWY 21: TERRAIN 394 FT FROM DER, 594 FT RIGHT OF CENTERLINE, 1068 FT MSL.
TERRAIN 1892 FT FROM DER, 989 FT RIGHT OF CENTERLINE, 1108 FT MSL.
TREE 2354 FT FROM DER, 725 FT LEFT OF CENTERLINE, 1126 FT MSL.
TREES BEGINNING 3137 FT FROM DER, 737 FT RIGHT OF CENTERLINE, UP TO 1169 FT MSL.
TREES BEGINNING 3641 FT FROM DER, 757 FT RIGHT OF CENTERLINE, UP TO 1171 FT MSL.
TREE 3700 FT FROM DER, 1344 FT RIGHT OF CENTERLINE, 1174 FT MSL.
TREES BEGINNING 3746 FT FROM DER, 349 FT RIGHT OF CENTERLINE, UP TO 1176 FT MSL.
TREE, POLE BEGINNING 3857 FT FROM DER, 463 FT RIGHT OF CENTERLINE, UP TO 1188 FT MSL.
TREES BEGINNING 4081 FT FROM DER, 732 FT RIGHT OF CENTERLINE, UP TO 1192 FT MSL.
TREES BEGINNING 4406 FT FROM DER, 1030 FT RIGHT OF CENTERLINE, UP TO 1193 FT MSL.
TREE, POLE BEGINNING 4773 FT FROM DER, 1008 FT RIGHT OF CENTERLINE, UP TO 1194 FT MSL.

NOTE: RWY 31: TREE 164 FT FROM DER, 456 FT LEFT OF CENTERLINE, 1081 FT MSL.
TREE 523 FT FROM DER, 361 FT RIGHT OF CENTERLINE, 1125 FT MSL.
TREE, POLE BEGINNING 567 FT FROM DER, 362 FT RIGHT OF CENTERLINE, UP TO 1126 FT MSL.

QUALITY
12
CHECKED

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TREES BEGINNING 2309 FT FROM DER, 587 FT LEFT OF CENTERLINE, UP TO 1150 FT MSL.
TREES BEGINNING 1.1 NM FROM DER, 139 FT RIGHT OF CENTERLINE, UP TO 14 FT AGL/1331 FT MSL.
TREE, TERRAIN BEGINNING 1.2 NM FROM DER, 452 FT RIGHT OF CENTERLINE, UP TO 30 FT AGL/1340 FT MSL.
TREES BEGINNING 1.5 NM FROM DER, 1288 FT RIGHT OF CENTERLINE, UP TO 1358 FT MSL.

CONTROLLING OBSTACLES:

RWY 3: 1391 FT MSL BUILDING 391019.97N/0963924.96W (CLIMB GRADIENT) (CLIMB-TO ALTITUDE), 1421 FT MSL TANK 391002.26N/0963726.81W (CEILING) (VISIBILITY).
RWY 13: 1229 FT MSL TREE 390732.06N/0963856.87W (CLIMB GRADIENT) (CLIMB-TO ALTITUDE), 1261 FT MSL TOWER 390659.42N/0963912.18W (CEILING) (VISIBILITY).
RWY 31: 1331 FT MSL TREE 391009.37N/0964107.68W (CLIMB GRADIENT) (CLIMB-TO ALTITUDE), 1358 FT MSL TREE 391021.03N/0964135.21W (CEILING), 1334 FT MSL TREE 391026.36N/0964141.14W (VISIBILITY).
OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 3: 1492 FT MSL AAO 391024.00N/0963921.00W.
VISUAL CLIMB AREA OBSTACLE: 1489 FT MSL TOWER 390501.14N/0964009.96W.

REMARKS:

60 FT VEGETATION HEIGHT USED.
CHART NOTE AT BOTTOM OF TEXTUAL DEPARTURE PROCEDURES: RWY 31: DEPARTURE NA WHEN R-3602B ACTIVE.
CHART NOTE AT BOTTOM OF TEXTUAL DEPARTURE PROCEDURES: R-3602B RESTRICTED AREA IMMEDIATELY WEST OF AIRPORT.

<u>FLIGHT INSPECTED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
PENDING	DAVID TEFFETELLER May 10, 2023	FIOG		
<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
FRANK MOORE	DAVID TEFFETELLER May 10, 2023	AJV-A433	04/04/2023	
<u>APPROVED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
JOHNNIE BAKER III	DAVID TEFFETELLER May 10, 2023	AJV-A430	08/10/2023	MANAGER

REQUIRED EFFECTIVE DATE:

08/10/2023

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒

OTHER:

ZKC, MHK ATCT

CHANGES - REASONS:

UPDATED TAKEOFF OBSTACLE NOTES - NEW EVALUATION FOLLOWING RWY CONSTRUCTION PROJECT AND NEW SURVEY.
RWY 3 TAKEOFF MINIMUMS CHANGED FROM 400-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 360 FEET PER NM TO 1600 TO 400-2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 289 FEET PER NM TO 1500 - NEW EVALUATION FOLLOWING RWY CONSTRUCTION PROJECT AND NEW SURVEY.
RWY 13 TAKEOFF MINIMUMS CHANGED FROM 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 219 FEET PER NM TO 1300 TO 300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 219 FEET PER NM TO 1300 - NEW EVALUATION FOLLOWING RWY CONSTRUCTION PROJECT AND NEW SURVEY.
RWY 31 TAKEOFF MINIMUMS CHANGED FROM 400-2 1/4 OR STANDARD WITH MINIMUM CLIMB OF 277 FEET PER NM TO 1500 TO 300-2 OR STANDARD WITH MINIMUM CLIMB OF 298 FEET PER NM TO 1500 - NEW EVALUATION FOLLOWING RWY CONSTRUCTION PROJECT AND NEW SURVEY.
RWY 31 VCOA ADDED - REQUIRED BY PENETRATION.

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12
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