

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
NDB STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.27

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT ID</u> KMDH	<u>PROCEDURE NAME</u> NDB RWY 18L	<u>ORIGINAL/AMENDMENT</u> 13B	<u>CITY</u> CARBONDALE/MURPHYSBORO	<u>STATE</u> IL		
<u>AIRPORT ELEVATION</u> 411	<u>TDZE</u> 407	<u>SUPERSEDED</u> NDB RWY 18L	<u>ORIGINAL/AMENDMENT</u> 13A	<u>DATED</u> 04/22/2021	<u>MAG VAR</u> 1W	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> MDH	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ENL VORTAC	IAF	HEMPA/ENL 27.04 DME/RADAR	NOPT				184.47	27.04	2400
HEMPA/ENL 27.04 DME/RADAR	IF	CABBI LOM					182.12	6.20	2000

MISSED APPROACH

MAP:

4.90 NM AFTER CABBI LOM

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2100 THEN CLIMBING RIGHT TURN TO 2400 DIRECT CABBI LOM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L SIDE OF COURSE 002.34 OUTBOUND 2400 FT WITHIN 10 MILES OF CABBI LOM (IAF)
2.
3. FAC: 182.34 FAF: CABBI LOM DIST FAF TO MAP: 4.90 DIST FAF TO THLD: 4.90
4. MIN ALT: CABBI LOM 2000
8. MSA FROM: CABBI LOM 2700

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-18L CAT A/B VISIBILITY TO 1 SM.
CHART NOTE: CIRCLING RWY 6, 36L NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ENL VORTAC AIRWAY RADIALS 198 CW 225



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

<u>AIRPORT ID</u> KMDH	<u>PROCEDURE NAME</u> NDB RWY 18L	<u>AMDT NO.</u> 13B	<u>CITY</u> CARBONDALE/MURPHYSBORO	<u>STATE</u> IL	<u>AIRPORT ELEVATION</u> 411	<u>FACILITY</u> MDH
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PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM
ENL VORTAC

TO
HEMPA/ENL 27.04 DME/RADAR

<u>RNP</u>	<u>DISTANCE</u> 27.04	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
5.TOWER (17-000209)	380612.00N/0891440.00W		1389	50	50	2D	1000					2400
6.TERRAIN	382203.00N/0891300.00W		598 (600)								AS1500	2100

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM
HEMPA/ENL 27.04 DME/RADAR

TO
CABBI LOM

<u>RNP</u>	<u>DISTANCE</u> 6.20	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
7.TOWER (17-000322)	375905.00N/0891405.00W		847	20	50	1D	500					1400
8.TERRAIN	375821.00N/0891621.00W		463 (500)								AS1500	2000

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE: PT

FROM
10 NM

TO
CABBI LOM

RNP	DISTANCE 10.00	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TOWER (17-000322)	375905.00N/0891405.00W		847	20	50	1D	500					1400
9.TERRAIN	375842.00N/0891706.00W		466 (500)								AS1500	2000

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

FINAL

FROM
CABBI LOM

TO
4.90 NM AFTER CABBI LOM

RNP	DISTANCE 4.90	PAT	MAP 4.90 NM AFTER CABBI LOM	HAT 453			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
10.TREE (17-033914)	374943.96N/0891430.00W		550	50	20	2C	300					860

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



PROCEDURE TURN

FROM
CABBI LOM

TO
10 NM

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.TOWER (17-000209)	380612.00N/0891440.00W		1389	50	50	2D	1000				AT11	2400
11.TERRAIN	380557.00N/0892539.00W		555 (600)								AT1500	2100

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

MISSED APPROACH

FROM
4.90 NM AFTER CABBI LOM

TO
CABBI LOM

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 560					
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
								ASC				2400
1.TOWER (17-002734)	374204.00N/0892218.00W		1130	500	125	5E	1000					2200
9.TERRAIN	375842.00N/0891706.00W		466 (500)								AS1500	2000

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
12.TOWER (17-000627)	374516.00N/0891622.00W	1.30	489	550	250	50	4D	300		AC50	900
CATEGORY B											
13.TOWER (17-024251)	374501.75N/0891713.92W	1.82	509	604	20	3	1A	300			920
CATEGORY C											
14.TOWER (17-000321)	374330.66N/0891525.50W	2.86	769	866	20	3	1A	300			1180
CATEGORY D											
14.TOWER (17-000321)	374330.66N/0891525.50W	3.73	769	866	20	3	1A	300			1180

CIRCLING REMARKS:

MSA

CENTER
CABBI LOM

RADIUS
25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (17-000329)	373650.00N/0885220.00W	132	23.5	1638	500	50	5D	1000			2700

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
MDH TOWER, ZKC ARTCC

<u>WX SERVICE</u> ASOS	<u>LOCATION</u> KMDH	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KMDH	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> AWOS-3	<u>LOCATION</u> KMWA	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KMWA	<u>DISTANCE</u> 11.546	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 36

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KMDH 411, KMWA 472
RA = 35.1.

<u>PRIMARY NAVAID</u> MDH NDB	<u>MONITOR POINT</u> MDH ATCT	<u>HRS OPERATION</u> *TWR OPEN (SEE CHART SUPPLEMENT FOR HOURS OF OPERATION) **TWR CLOSED	<u>CAT</u> 1 3
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<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW06 - MIRL (PCL), REIL, VASI-4L (PCL)	BSC-G	
RW18R - MIRL, PVASI-PSIL	BSC-G	
RW24 - MIRL (PCL), REIL, PAPI-4R (PCL)	BSC-G	
RW36L - MIRL, PVASI-PSIL	BSC-G	
RW36R - HIRL (PCL), REIL, PAPI-4L (PCL)	NPI-G	
RW18L - MALSR (PCL), HIRL (PCL)	PIR-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	☒	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	☒	FT FROM CENTERLINE	



CRITICAL TEMPERATURES

CRITICAL LOW

CRITICAL HIGH

ACT

APT ISA

CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	CIRCLING RWY 36L		
20:1			
411 TERRAIN (17-033944) 374610.49N/0891533.01W (0.93)			
Final Type	CIRCLING RWY 6		
20:1			
488 TREE (17-040587) 374630.73N/0891540.97W (51.75)		478 TREE (17-046835) 374627.95N/0891541.00W (34.75)	
491 TREE (17-046924) 374628.72N/0891546.54W (30.27)		487 TREE (17-046923) 374627.89N/0891545.31W (28.52)	
463 TREE (17-040585) 374629.79N/0891540.02W (27.74)		489 TREE (17-056800) 374628.87N/0891547.18W (26.4)	
493 TREE (17-043573) 374628.45N/0891548.29W (25.48)		486 TREE (17-040637) 374624.10N/0891545.02W (19.14)	
481 TREE (17-046925) 374623.91N/0891543.52W (18.92)		476 TREE (17-056686) 374626.90N/0891544.69W (17.24)	
451 TREE (17-045794) 374628.28N/0891538.95W (15.74)		487 TREE (17-044839) 374627.21N/0891548.57W (15.43)	
463 TREE (17-040630) 374628.19N/0891542.62W (14.68)		473 TREE (17-033714) 374627.43N/0891545.20W (13.77)	
467 TREE (17-046269) 374626.16N/0891542.68W (13.44)		471 TREE (17-040633) 374625.55N/0891544.08W (11.03)	
464 TREE (17-042578) 374625.02N/0891542.11W (9.61)		479 TREE (17-040638) 374625.47N/0891547.19W (7.94)	
477 TREE (17-040613) 374628.17N/0891549.83W (3.4)		472 TREE (17-056688) 374623.94N/0891545.69W (2.4)	
477 TREE (17-044840) 374625.77N/0891548.69W (1.44)		474 TREE (17-040539) 374623.40N/0891546.31W (0.9)	
465 TREE (17-046270) 374625.70N/0891545.52W (0.36)			

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS



PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - FINAL FACILITY DOES NOT HAVE DME.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

100' VEGETATION USED PER FPT

CONTINGENCY NOTES:

USE MARION ALTIMETER SETTING AND INCREASE ALL MDA 40 FEET AND INCREASE S-18L CAT C/D VISIBILITY 1/8 SM.

FOR INOPERATIVE ALS, WHEN USING MARION ALTIMETER SETTING, INCREASE S-18L CAT A/B VISIBILITY TO 1 SM, AND CAT C/D VISIBILITY TO 1 3/8 SM.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



AIRPORT ID KMDH	PROCEDURE NAME NDB RWY 18L	AMDT NO. 13B	CITY CARBONDALE/MURPHYSBORO	STATE IL	AIRPORT ELEVATION 411	FACILITY MDH
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PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	2.90
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	2.83
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	181.34
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	400
DISTANCE FROM	THLD	TO 1500FT POINT	4.70
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.53
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	181.34
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	400

THRESHOLD
COORDINATES
(IF STR-IN)

374718.87N/0891452.56W

ARP COORDINATES

374641.10N/0891507.30W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 18L DISTANCE 0.66 NM

FAF
COORDINATES

375212.21N/0891444.69W

FIX NAME
COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED

QUALITY
25
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

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PART E: PREPARED BY

<u>NAME</u> DONALD H. LANIER (PETER GETZ)	<u>OFFICE</u> AJV-A431	<u>DATE</u> 01/11/2021	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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