

US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
STANDARD TERMINAL ARRIVAL (STAR)

NFDD 163

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet. MSL. Altitudes are minimum altitudes unless otherwise indicated.
 Distances are in nautical miles (NM). Graphic depiction attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
MADII RNAV	TWO	MADII.MADII2	ONE	17 OCT 2013	15 OCT 2015

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
CHDRR	CHDRR.MADII2	CHDRR	CHDRR						AT 14000
			ZANDI	211.15	34.52	6000	2600		
			HOPSS	196.18	07.58	6000	2500		
			HUNKA	184.75	10.37	6000	2200		
			MADII	187.90	13.94	6000	2300		
FALLS	FAH.MADII2	FAH VOR/DME	FAH VOR/DME						
			KOHL	180.65	07.85	9000	2200		BETWEEN FL180 AND FL210
			GURNN	178.38	07.87	6000	2200		AT/BELOW FL180
			CHDRR	193.92	10.44	6000	2100		AT 14000
			ZANDI	211.15	34.52	6000	2600		
			HOPSS	196.18	07.58	6000	2500		
			HUNKA	184.75	10.37	6000	2200		
			MADII	187.90	13.94	6000	2300		
FGHRN	FGHRN.MADII2	FGHRN	FGHRN						
			FAH VOR/DME	188.74	20.10	9000	2300		
			KOHL	180.65	07.85	9000	2200		BETWEEN FL180 AND FL210
			GURNN	178.38	07.87	6000	2200		AT/BELOW FL180
			CHDRR	193.92	10.44	6000	2100		AT 14000
			ZANDI	211.15	34.52	6000	2600		
			HOPSS	196.18	07.58	6000	2500		
			HUNKA	184.75	10.37	6000	2200		
			MADII	187.90	13.94	6000	2300		
FOLGO	FOLGO.MADII2	FOLGO	FOLGO						
			FGHRN	189.27	45.40	16000	2400		
			FAH VOR/DME	188.74	20.10	9000	2300		
			KOHL	180.65	07.85	9000	2200		BETWEEN FL180 AND FL210
			GURNN	178.38	07.87	6000	2200		AT/BELOW FL180
			CHDRR	193.92	10.44	6000	2100		AT 14000

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Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes	
			ZANDI	211.15	34.52	6000	2600			
			HOPSS	196.18	07.58	6000	2500			
			HUNKA	184.75	10.37	6000	2200			
			MADII	187.90	13.94	6000	2300			
GREEN BAY	GRB.MADII2	GRB VORTAC	GRB VORTAC							
			FGHRN	150.99	32.00	16000	3100			
			FAH VOR/DME	188.74	20.10	9000	2300			
			KOHL	180.65	07.85	9000	2200		BETWEEN FL180 AND FL210	
			GURNN	178.38	07.87	6000	2200		AT/BELOW FL180	
			CHDRR	193.92	10.44	6000	2100		AT 14000	
			ZANDI	211.15	34.52	6000	2600			
			HOPSS	196.18	07.58	6000	2500			
			HUNKA	184.75	10.37	6000	2200			
			MADII	187.90	13.94	6000	2300			
KOHL	KOHL.MADII2	KOHL	KOHL						BETWEEN FL180 AND FL210	
			GURNN	178.38	07.87	6000	2200		AT/BELOW FL180	
			CHDRR	193.92	10.44	6000	2100		AT 14000	
			ZANDI	211.15	34.52	6000	2600			
			HOPSS	196.18	07.58	6000	2500			
			HUNKA	184.75	10.37	6000	2200			
			MADII	187.90	13.94	6000	2300			
LGHRN	LGHRN.MADII2	LGHRN	LGHRN							
			FGHRN	253.17	31.04	16000	2300			
			FAH VOR/DME	188.74	20.10	9000	2300			
			KOHL	180.65	07.85	9000	2200		BETWEEN FL180 AND FL210	
			GURNN	178.38	07.87	6000	2200		AT/BELOW FL180	
			CHDRR	193.92	10.44	6000	2100		AT 14000	
			ZANDI	211.15	34.52	6000	2600			
			HOPSS	196.18	07.58	6000	2500			

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Arrival Name			Number	STAR Computer Code	Superseded Number			Dated	Effective Date
MADII RNAV			TWO	MADII.MADII2	ONE			17 OCT 2013	15 OCT 2015
Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
			HUNKA	184.75	10.37	6000	2200		
			MADII	187.90	13.94	6000	2300		
ZANDI	ZANDI.MADII2	ZANDI	ZANDI						
			HOPSS	196.18	07.58	6000	2500		
			HUNKA	184.75	10.37	6000	2200		
			MADII	187.90	13.94	6000	2300		

ARRIVAL ROUTE DESCRIPTION:

FROM MADII ON TRACK 133.22/9.70 TO SOOLU (MEA 6000/MOCA 2500).

LANDING RWY 10L/C/R, 09R/L, 22R/L, 04R/L, 27R/L, 14R: FROM SOOLU ON TRACK 142.34/8.26 TO KURKK (MEA 4000/MOCA 2300), THEN ON TRACK 092.95/10.41 TO VULCN (MEA 4000/MOCA 2200), THEN ON TRACK 093.09/12.75 TO HIMGO (MEA 4000/MOCA 2000), THEN ON TRACK 093.09. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 28L/C/R: FROM SOOLU ON TRACK 162.12/20.01 TO JORJO (MEA 4000/MOCA 2500), THEN ON TRACK 093.00/8.37 TO MONKZ (MEA 4000/MOCA 2200), THEN ON TRACK 093.05/13.94 TO TONIE (MEA 4000/MOCA 3400), THEN ON TRACK 093.05. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED.

NOTE: RNAV 1.

NOTE: DME/DME/IRU OR GPS REQUIRED.

NOTE: ZANDI ENROUTE TRANSITION: FOR MILWAUKEE TERMINAL AREA DEPARTURES ONLY.

FIXES AND/OR HOLDING PATTERNS:

CHART RALFE AS A STAND-ALONE WAYPOINT.

CHART HOLDING AT CHDRR: HOLD NW, LT, 150.00 INBOUND, 10 NM LEGS.

CHART HOLDING AT ZANDI: HOLD N, LT, 196.18 INBOUND, 10 NM LEGS.

CHART HOLDING AT HUNKA: HOLD N, RT, 184.75 INBOUND, 10 NM LEGS.

CHART HOLDING AT GRB VORTAC: HOLD NW, RT, 150.99 INBOUND, 10 NM LEGS.

CHART HOLDING AT FAH VOR/DME: HOLD W, RT, 090.00 INBOUND, 10 NM LEGS.

COMMUNICATIONS:

ORD ATIS, CHICAGO APP CON

AIRPORTS SERVED:

CHICAGO O'HARE INTERNATIONAL AIRPORT, CHICAGO, IL

LOST COMMUNICATIONS PROCEDURE:REMARKS:

US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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MADII RNAV	TWO	MADII.MADII2	ONE	17 OCT 2013	15 OCT 2015

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0).

REFERENCE MAG VAR: KORD 3W/2010.

CHANGES:

- 1.REMOVED SAW TRANSITION
- 2.ADDED FOLGO, FGHRN, LGHRN, KOHLL, ZANDI, FAH, AND CHDRR TRANSITIONS
- 3.ADDED LGHRN WP
- 4.RECODED COMMON ROUTE TO START AT MADII
- 5.REMOVED RWY 14L/32R
- 6.ADDED RWYS 10R/28L
- 7.ADDED MOCAS

REASONS:

- 1-6. ATC REQUEST FOR TRAFFIC FLOW.
7. 7100.9E REQUIREMENT.

US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

STAR (DATA RECORD)

Arrival Name MADII RNAV		Number TWO		STAR Computer Code MADII.MADII2			Superseded Number ONE		Dated 17 OCT 2013		Effective Date 15 OCT 2015	
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS			
En Route Transition												
CHDRR	432010.89N / 0875219.44W	Y		IF			AT 14000		CHDRR.MADII2			
ZANDI	424942.03N / 0881427.17W	Y	FB	TF	208.15	34.52						
HOPSS	424219.25N / 0881647.79W	Y	FB	TF	193.18	07.58						
HUNKA	423157.23N / 0881713.51W	Y	FB	TF	181.75	10.37						
MADII	421803.47N / 0881849.73W	Y	FB	TF	184.90	13.94						
En Route Transition												
FAH VOR/DME	434607.63N / 0875055.57W	Y		IF					FAH.MADII2			
KOHL	433816.97N / 0875029.01W	Y	FB	TF	177.65	07.85	FL180BFL210					
GURNN	433026.14N / 0874936.77W	Y	FB	TF	175.38	07.87	AT/BELOW FL180					
CHDRR	432010.89N / 0875219.44W	Y	FB	TF	190.92	10.44	AT 14000					
ZANDI	424942.03N / 0881427.17W	Y	FB	TF	208.15	34.52						
HOPSS	424219.25N / 0881647.79W	Y	FB	TF	193.18	07.58						
HUNKA	423157.23N / 0881713.51W	Y	FB	TF	181.75	10.37						
MADII	421803.47N / 0881849.73W	Y	FB	TF	184.90	13.94						
En Route Transition												
FGHRN	440608.00N / 0874809.00W	Y		IF					FGHRN.MADII2			
FAH VOR/DME	434607.63N / 0875055.57W	Y	FB	TF	185.74	20.10						
KOHL	433816.97N / 0875029.01W	Y	FB	TF	177.65	07.85	FL180BFL210					
GURNN	433026.14N / 0874936.77W	Y	FB	TF	175.38	07.87	AT/BELOW FL180					
CHDRR	432010.89N / 0875219.44W	Y	FB	TF	190.92	10.44	AT 14000					
ZANDI	424942.03N / 0881427.17W	Y	FB	TF	208.15	34.52						
HOPSS	424219.25N / 0881647.79W	Y	FB	TF	193.18	07.58						
HUNKA	423157.23N / 0881713.51W	Y	FB	TF	181.75	10.37						
MADII	421803.47N / 0881849.73W	Y	FB	TF	184.90	13.94						
En Route Transition												
FOLGO	445115.84N / 0874116.27W	Y		IF					FOLGO.MADII2			

QUALITY

17

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QUALITY
17
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STAR (DATA RECORD)

Arrival Name MADII RNAV	Number TWO	STAR Computer Code MADII.MADII2	Superseded Number ONE	Dated 17 OCT 2013	Effective Date 15 OCT 2015
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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
FGHRN	440608.00N / 0874809.00W	Y	FB	TF	186.27	45.40			
FAH VOR/DME	434607.63N / 0875055.57W	Y	FB	TF	185.74	20.10			
KOHL	433816.97N / 0875029.01W	Y	FB	TF	177.65	07.85	FL180BFL210		
GURNN	433026.14N / 0874936.77W	Y	FB	TF	175.38	07.87	AT/BELOW FL180		
CHDRR	432010.89N / 0875219.44W	Y	FB	TF	190.92	10.44	AT 14000		
ZANDI	424942.03N / 0881427.17W	Y	FB	TF	208.15	34.52			
HOPSS	424219.25N / 0881647.79W	Y	FB	TF	193.18	07.58			
HUNKA	423157.23N / 0881713.51W	Y	FB	TF	181.75	10.37			
MADII	421803.47N / 0881849.73W	Y	FB	TF	184.90	13.94			

En Route Transition

GRB VORTAC	443318.58N / 0881141.48W	Y		IF					GRB.MADII2
FGHRN	440608.00N / 0874809.00W	Y	FB	TF	147.99	32.00			
FAH VOR/DME	434607.63N / 0875055.57W	Y	FB	TF	185.74	20.10			
KOHL	433816.97N / 0875029.01W	Y	FB	TF	177.65	07.85	FL180BFL210		
GURNN	433026.14N / 0874936.77W	Y	FB	TF	175.38	07.87	AT/BELOW FL180		
CHDRR	432010.89N / 0875219.44W	Y	FB	TF	190.92	10.44	AT 14000		
ZANDI	424942.03N / 0881427.17W	Y	FB	TF	208.15	34.52			
HOPSS	424219.25N / 0881647.79W	Y	FB	TF	193.18	07.58			
HUNKA	423157.23N / 0881713.51W	Y	FB	TF	181.75	10.37			
MADII	421803.47N / 0881849.73W	Y	FB	TF	184.90	13.94			

En Route Transition

KOHL	433816.97N / 0875029.01W	Y		IF			FL180BFL210		KOHL.MADII2
GURNN	433026.14N / 0874936.77W	Y	FB	TF	175.38	07.87	AT/BELOW FL180		
CHDRR	432010.89N / 0875219.44W	Y	FB	TF	190.92	10.44	AT 14000		
ZANDI	424942.03N / 0881427.17W	Y	FB	TF	208.15	34.52			
HOPSS	424219.25N / 0881647.79W	Y	FB	TF	193.18	07.58			

QUALITY
17
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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
HUNKA	423157.23N / 0881713.51W	Y	FB	TF	181.75	10.37			
MADII	421803.47N / 0881849.73W	Y	FB	TF	184.90	13.94			

En Route Transition

LGHRN	441647.00N / 0870738.00W	Y		IF					LGHRN.MADII2
FGHRN	440608.00N / 0874809.00W	Y	FB	TF	250.17	31.04			
FAH VOR/DME	434607.63N / 0875055.57W	Y	FB	TF	185.74	20.10			
KOHL	433816.97N / 0875029.01W	Y	FB	TF	177.65	07.85	FL180BFL210		
GURNN	433026.14N / 0874936.77W	Y	FB	TF	175.38	07.87	AT/BELOW FL180		
CHDRR	432010.89N / 0875219.44W	Y	FB	TF	190.92	10.44	AT 14000		
ZANDI	424942.03N / 0881427.17W	Y	FB	TF	208.15	34.52			
HOPSS	424219.25N / 0881647.79W	Y	FB	TF	193.18	07.58			
HUNKA	423157.23N / 0881713.51W	Y	FB	TF	181.75	10.37			
MADII	421803.47N / 0881849.73W	Y	FB	TF	184.90	13.94			

En Route Transition

ZANDI	424942.03N / 0881427.17W	Y		IF					ZANDI.MADII2
HOPSS	424219.25N / 0881647.79W	Y	FB	TF	193.18	07.58			
HUNKA	423157.23N / 0881713.51W	Y	FB	TF	181.75	10.37			
MADII	421803.47N / 0881849.73W	Y	FB	TF	184.90	13.94			

Common Route

MADII	421803.47N / 0881849.73W	Y		IF					MADII.MADII2
SOOLU	421146.95N / 0880851.70W	Y	FB	TF	130.22	09.70			

Runway Transition

SOOLU	421146.95N / 0880851.70W	Y		IF					
KURKK	420530.61N / 0880137.92W	Y	FB	TF	139.34	08.26			
VULCN	420530.34N / 0874739.02W	Y	FB	TF	089.95	10.41			

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17
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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
HIMGO	420527.84N / 0873031.89W	Y	FO	TF	090.09	12.75			
KORD:KORD RWYS 4L/R, 9L/R, 10L/C/R, 14R, 22L/R, 27L/R				FM	090.09				RECOMMENDED NAVAID: MZZ VOR/DME

Runway Transition

SOOLU	421146.95N / 0880851.70W	Y		IF					
JORJO	415304.14N / 0875918.78W	Y	FB	TF	159.12	20.01			
MONKZ	415303.59N / 0874806.47W	Y	FB	TF	090.00	08.37			
TONIE	415301.37N / 0872926.75W	Y	FO	TF	090.05	13.94			
KORD:RWY 28L/C/R				FM	090.05				RECOMMENDED NAVAID: MZZ VOR/DME

