

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD TERMINAL ARRIVAL (STAR)

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 depictions attached.

Arrival Name TRTLL (RNAV)	Number SIX	STAR Computer Code TRTLL.TRTLL6	Superseded Number FIVE	Dated 01/03/2019	Effective Date				
TRANSITION ROUTES:									
Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
BYLAW	BYLAW.TRTLL6	BYLAW	BYLAW						BETWEEN FL200 AND FL230
			TRTLL	083.23	30.45	5000	3100		AT 11000
CASHN	CASHN.TRTLL6	CASHN	CASHN						
			VINCA	043.74	30.64	5000	2000		
			MAROC	044.02	31.19	5000	2400		BETWEEN FL240 AND FL270
			TRICH	045.11	38.30	5000	2400		BETWEEN 14000 AND 15000
			TRTLL	045.46	13.11	5000	2200		AT 11000
FORISTELL	FTZ.TRTLL6	FTZ VORTAC	FTZ VORTAC						
			GROOV	025.92	48.01	5000	2200		
			CASHN	027.29	34.73	5000	2200		
			VINCA	043.74	30.64	5000	2000		
			MAROC	044.02	31.19	5000	2400		BETWEEN FL240 AND FL270
			TRICH	045.11	38.30	5000	2400		BETWEEN 14000 AND 15000
			TRTLL	045.46	13.11	5000	2200		AT 11000
MAROC	MAROC.TRTLL6	MAROC	MAROC						BETWEEN FL240 AND FL270
			TRICH	045.11	38.30	5000	2400		BETWEEN 14000 AND 15000
			TRTLL	045.46	13.11	5000	2200		AT 11000
PNTAC	PNTAC.TRTLL6	PNTAC	PNTAC						
			TRICH	354.80	23.47	5000	2300		BETWEEN 14000 AND 15000
			TRTLL	045.46	13.11	5000	2200		AT 11000
ST LOUIS	STL.TRTLL6	STL VORTAC	STL VORTAC						
			GROOV	356.28	34.44	5000	2200		
			CASHN	027.29	34.73	5000	2200		
			VINCA	043.74	30.64	5000	2000		
			MAROC	044.02	31.19	5000	2400		BETWEEN FL240 AND FL270
			TRICH	045.11	38.30	5000	2400		BETWEEN 14000 AND 15000
			TRTLL	045.46	13.11	5000	2200		AT 11000

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Arrival Name		Number	STAR Computer Code	Superseded Number	Dated	Effective Date			
TRTLL (RNAV)		SIX	TRTLL.TRTLL6	FIVE	01/03/2019				
Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
VINCA	VINCA.TRTLL6	VINCA	VINCA						
			MAROC	044.02	31.19	5000	2400		BETWEEN FL240 AND FL270
			TRICH	045.11	38.30	5000	2400		BETWEEN 14000 AND 15000
			TRTLL	045.46	13.11	5000	2200		AT 11000
WELTS	WELTS.TRTLL6	WELTS	WELTS						
			MCDEE	053.43	51.61	5000	2300		
			CASHN	053.99	38.96	5000	2200		
			VINCA	043.74	30.64	5000	2000		
			MAROC	044.02	31.19	5000	2400		BETWEEN FL240 AND FL270
			TRICH	045.11	38.30	5000	2400		BETWEEN 14000 AND 15000
			TRTLL	045.46	13.11	5000	2200		AT 11000

ARRIVAL ROUTE DESCRIPTION:

FROM TRTLL ON TRACK 044.75/19.69 TO HIHRY, THEN ON TRACK 044.71/15.30 TO RINNO.

LANDING RWY 22L/R, 4L/R, 27L/C, 28C/R, 9L/C/R, 10L/C/R: FROM RINNO ON TRACK 047.72/6.68 TO JORJO, THEN ON TRACK 093.00/8.37 TO MONKZ, THEN ON TRACK 093.05/13.94 TO TONIE, THEN ON TRACK 093.05. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 27R: FROM RINNO ON TRACK 012.76/17.43 TO KURKK, THEN ON TRACK 092.95/10.41 TO VULCN, THEN ON TRACK 093.09/12.75 TO HIMGO, THEN ON TRACK 093.09. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 28L: FROM RINNO ON TRACK 047.72/6.68 TO JORJO, THEN ON TRACK 093.00/8.37 TO MONKZ, THEN ON TRACK 095.45/14.00 TO RREGY, THEN ON TRACK 095.45. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED

NOTE: RNAV 1

NOTE: DME/DME/IRU OR GPS REQUIRED

NOTE: STL, VINCA TRANSITIONS: ATC ASSIGNED ONLY.

NOTE: ORD LANDING EAST: EXPECT RADAR VECTORS TO FINAL APPROACH COURSE AFTER HIHRY.

NOTE: PNTAC TRANSITION: FOR CMI, SPI, AND BMI DEPARTURES ONLY, OR AS ASSIGNED BY ATC.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT CASHN: HOLD SW, LT, 053.99 INBOUND, 15 NM LEGS.

CHART HOLDING AT GROOV: HOLD S, RT, 356.28 INBOUND, 12 NM LEGS.

CHART HOLDING AT MAROC: HOLD SW, LT, 044.02 INBOUND, 12 NM LEGS.

CHART HOLDING AT MCDEE: HOLD SW, LT, 053.43 INBOUND, 16 NM LEGS.

CHART HOLDING AT TRTLL: HOLD SW, LT, 045.46 INBOUND, 10 NM LEGS.

CHART HOLDING AT WELTS: HOLD SW, LT, 039.27 INBOUND, 16 NM LEGS.

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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
TRTLL (RNAV)	SIX	TRTLL.TRTLL6	FIVE	01/03/2019	

COMMUNICATIONS:

ORD ATIS, CHICAGO APP CON.

AIRPORTS SERVED:

CHICAGO O'HARE INTL, CHICAGO, IL (KORD)

LOST COMMUNICATIONS PROCEDURE:

REMARKS:

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)

REFERENCE MAGNETIC VARIATION = KORD 03W/2010

CHART AT HIMGO TERMINUS: KORD LDG RWY 27R

CHART AT TONIE TERMINUS: KORD LDG RWY 4L/R, 9L/C/R, 10L/C/R, 22L/R, 27L/C, 28C/R

CHART AT RREGY TERMINUS: KORD LDG RWY 28L

FLIGHT INSPECTED BY:

SCOTT WIEBE
Name

FICO
Organization

8/30/2020
Date

Digitally signed by

DAVID DANNER

Sep 01, 2020

Signature

DEVELOPED BY:

JOSEPH BOCIK, AIRSPACE AND PROCEDURES
MANAGER
Name

CHICAGO ARTCC
Organization

04/02/2020
Date

Digitally signed by

DAVID DANNER

Sep 01, 2020

Signature

APPROVED BY:

PAT MULQUEEN, MANAGER
Name

AJV-A440
Organization

Date

Digitally signed by

DAVID DANNER

Sep 01, 2020

Signature

CHANGES:

1. CHANGE ALTITUDE RESTRICTION AT TRICH FROM 13000B15000 TO 14000B15000.
2. REMOVE ALTITUDE RESTRICTION AT VINCA.
3. REDUCE HOLDING PATTERN LEG LENGTH AT MCDEE FROM 20 DME TO 16 DME.
4. ADD HOLDING AT WELTS.
5. CHANGE ALTITUDE RESTRICTION AT BYLAW FROM FL190BFL220 TO TO FL200BFL230.
6. REPLACE PNT VOR/DME WITH PNTAC WP.
7. ADD CHART NOTE: ORD LANDING EAST: EXPECT RADAR VECTORS AFTER HIHRY.



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TRTLL (RNAV)	SIX	TRTLL.TRLL6	FIVE	01/03/2019	
8. ADD VINCA ENROUTE TRANSITION. 9. ADD CHART NOTE: VINCA TRANSITION: ATC ASSIGNED ONLY. 10. ADD RWY 9C/27C TO SOUTH DOWNWIND. 11. SEPARATED RWY 28L RUNWAY TRANSITION AND REMOVED TONIE WP, ADDED RREGY; FM FROM 093.05 TO 095.45. 12. MOVE BYLAW 0.78 NM NE. 13. REMOVE LENDR AS STAND ALONE WAYPOINT. 14. REMOVED MEAS/MOCAS FROM ARRIVAL 15. REMOVED MZZ AS RECOMMENDED NAVAID.					

REASONS:

- 1, 3, 5, 12. CORRECT CRITERIA FAILURES.
- 2, 13, 14, 15. NO LONGER NEEDED.
4. INCREASE FLOW CONTROL CAPABILITIES, REDUCE RADIO CHATTER.
6. PNT SCHEDULED FOR DECOMMISSIONING UNDER VOR MON.
7. REDUCE PILOT CONFUSION.
- 8, 9. ALLOW DATACOMM COMPATIBILITY WHEN AIRCRAFT ARE REROUTED.
10. NEW RUNWAY 9C/27C BEING COMMISSIONED.
11. ALLOW PARALLEL DOWNWIND TO RWY 28L OFFSET FAC.

THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 04/02/2020:

1. ADDED PROCEDURAL DATA NOTE FOR SPECIFIC TO PNTAC TRANSITION.



FEDERAL AVIATION ADMINISTRATION
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STAR (DATA RECORD)

Arrival Name TRTLL (RNAV)		Number SIX		STAR Computer Code TRTLL.TRLL6		Superseded Number FIVE		Dated 01/03/2019	Effective Date
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
BYLAW	411710.86N / 0891633.04W	Y		IF			FL200BFL230		BYLAW.TRLL6
TRTLL	412214.03N / 0883641.80W	Y	FB	TF	080.23	30.45	AT 11000		
En Route Transition									
CASHN	395732.00N / 0901534.00W	Y		IF					CASHN.TRLL6
VINCA	402043.25N / 0894924.67W	Y	FB	TF	040.74	30.64			
MAROC	404413.24N / 0892228.69W	Y	FB	TF	041.02	31.19	FL240BFL270		
TRICH	411233.94N / 0884827.19W	Y	FB	TF	042.11	38.30	14000B15000		
TRTLL	412214.03N / 0883641.80W	Y	FB	TF	042.46	13.11	AT 11000		
En Route Transition									
FTZ VORTAC	384139.60N / 0905816.57W	Y		IF					FTZ.TRLL6
GROOV	392552.71N / 0903408.70W	Y	FB	TF	022.92	48.01			
CASHN	395732.00N / 0901534.00W	Y	FB	TF	024.29	34.73			
VINCA	402043.25N / 0894924.67W	Y	FB	TF	040.74	30.64			
MAROC	404413.24N / 0892228.69W	Y	FB	TF	041.02	31.19	FL240BFL270		
TRICH	411233.94N / 0884827.19W	Y	FB	TF	042.11	38.30	14000B15000		
TRTLL	412214.03N / 0883641.80W	Y	FB	TF	042.46	13.11	AT 11000		
En Route Transition									
MAROC	404413.24N / 0892228.69W	Y		IF			FL240BFL270		MAROC.TRLL6
TRICH	411233.94N / 0884827.19W	Y	FB	TF	042.11	38.30	14000B15000		
TRTLL	412214.03N / 0883641.80W	Y	FB	TF	042.46	13.11	AT 11000		
En Route Transition									
PNTAC	404919.29N / 0884401.20W	Y		IF					PNTAC.TRLL6
TRICH	411233.94N / 0884827.19W	Y	FB	TF	351.80	23.47	14000B15000		
TRTLL	412214.03N / 0883641.80W	Y	FB	TF	042.46	13.11	AT 11000		

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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
STL VORTAC	385138.48N / 0902856.52W	Y		IF					STL.TRTLL6
GROOV	392552.71N / 0903408.70W	Y	FB	TF	353.28	34.44			
CASHN	395732.00N / 0901534.00W	Y	FB	TF	024.29	34.73			
VINCA	402043.25N / 0894924.67W	Y	FB	TF	040.74	30.64			
MAROC	404413.24N / 0892228.69W	Y	FB	TF	041.02	31.19	FL240BFL270		
TRICH	411233.94N / 0884827.19W	Y	FB	TF	042.11	38.30	14000B15000		
TRTLL	412214.03N / 0883641.80W	Y	FB	TF	042.46	13.11	AT 11000		
En Route Transition									
VINCA	402043.25N / 0894924.67W	Y		IF					VINCA.TRTLL6
MAROC	404413.24N / 0892228.69W	Y	FB	TF	041.02	31.19	FL240BFL270		
TRICH	411233.94N / 0884827.19W	Y	FB	TF	042.11	38.30	14000B15000		
TRTLL	412214.03N / 0883641.80W	Y	FB	TF	042.46	13.11	AT 11000		
En Route Transition									
WELTS	390022.96N / 0914622.15W	Y		IF					WELTS.TRTLL6
MCDEE	393306.00N / 0905456.00W	Y	FB	TF	050.43	51.61			
CASHN	395732.00N / 0901534.00W	Y	FB	TF	050.99	38.96			
VINCA	402043.25N / 0894924.67W	Y	FB	TF	040.74	30.64			
MAROC	404413.24N / 0892228.69W	Y	FB	TF	041.02	31.19	FL240BFL270		
TRICH	411233.94N / 0884827.19W	Y	FB	TF	042.11	38.30	14000B15000		
TRTLL	412214.03N / 0883641.80W	Y	FB	TF	042.46	13.11	AT 11000		
Common Route									
TRTLL	412214.03N / 0883641.80W	Y		IF			AT 11000		TRTLL.TRTLL6
HIHRY	413654.53N / 0881913.05W	Y	FB	TF	041.75	19.69			
RINNO	414819.56N / 0880536.16W	Y	FB	TF	041.71	15.30			

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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
Runway Transition									
RINNO	414819.56N / 0880536.16W	Y		IF					
JORJO	415304.14N / 0875918.78W	Y	FB	TF	044.72	06.68			
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 4L,RWY 4R,RWY 9C,RWY 9L,RWY 9R,RWY 10C,RWY 10L,RWY 10R,RWY 22L,RWY 22R,RWY 27C,RWY 27L,RWY 28C,RWY 28R				FM	090.05				
Runway Transition									
RINNO	414819.56N / 0880536.16W	Y		IF					
KURKK	420530.61N / 0880137.92W	Y	FB	TF	009.76	17.43			
VULCN	420530.34N / 0874739.02W	Y	FB	TF	089.95	10.41			
HIMGO	420527.84N / 0873031.89W	Y	FO	TF	090.09	12.75			
KORD:RWY 27R				FM	090.09				
Runway Transition									
RINNO	414819.56N / 0880536.16W	Y		IF					
JORJO	415304.14N / 0875918.78W	Y	FB	TF	044.72	06.68			
MONKZ	415303.59N / 0874806.47W	Y	FB	TF	090.00	08.37			
RREGY	415226.14N / 0872923.10W	Y	FO	TF	092.45	14.00			
KORD:RWY 28L				FM	092.45				