

US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
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 depiction attached.

Arrival Name KOLTS (RNAV)	Number TWO	STAR Computer Code KOLTS.KOLTS2	Superseded Number ONE	Dated 05 Mar 2015	Effective Date 10 NOV 2016
-------------------------------------	----------------------	---	---------------------------------	-----------------------------	--------------------------------------

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
JAAVE	JAAVE.KOLTS2	JAAVE	JAAVE						
			KOLTS	094.78	07.52	3200	2200		BETWEEN FL240 AND FL260
USIRE	USIRE.KOLTS2	USIRE	USIRE						
			JAAVE	094.50	65.76	6000	3100		
			KOLTS	094.78	07.52	3200	2200		BETWEEN FL240 AND FL260

ARRIVAL ROUTE DESCRIPTION:

FROM KOLTS ON TRACK 094.86/24.71 TO GARTE (MEA 2600), THEN ON TRACK 094.15/31.52 TO CROSS CIRGO AT OR ABOVE 11000 (MEA 2600), THEN ON TRACK 094.58/8.00 TO CROSS EKEKE AT OR ABOVE 10000 (MEA 2600).

LANDING RWY 05L: FROM EKEKE ON TRACK 092.90/11.99 TO CROSS GAZPA AT OR ABOVE 7000 AND AT 230 KIAS (MEA 2600), THEN ON TRACK 140.96/5.52 TO CROSS PETYN AT 6000 AND AT 210 KIAS (MEA 2500), THEN ON TRACK 229.23/7.50 TO WANOB (MEA 2500), THEN ON TRACK 229.23. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 05R: FROM EKEKE ON TRACK 092.90/11.99 TO CROSS GAZPA AT OR ABOVE 7000 AND AT 230 KIAS (MEA 2600), THEN ON TRACK 140.96/5.52 TO CROSS PETYN AT 6000 AND AT 210 KIAS (MEA 2500), THEN ON TRACK 229.23/7.50 TO WANOB (MEA 2500), THEN ON TRACK 229.23. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 23L: FROM EKEKE ON TRACK 107.53/9.62 TO CROSS MRRRK AT OR ABOVE 7000 AND AT 230 KIAS (MEA 2600), THEN ON TRACK 107.66/6.60 TO CROSS PETYN AT 6000 AND AT 210 KIAS (MEA 2500), THEN ON TRACK 049.95/6.50 TO CROSS ZOSAR AT 6000 AND AT 210 KIAS (MEA 2500), THEN ON TRACK 049.95. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 23R: FROM EKEKE ON TRACK 107.53/9.62 TO CROSS MRRRK AT OR ABOVE 7000 AND AT 230 KIAS (MEA 2600), THEN ON TRACK 107.66/6.60 TO CROSS PETYN AT 6000 AND AT 210 KIAS (MEA 2500), THEN ON TRACK 049.95/6.50 TO CROSS ZOSAR AT 6000 AND AT 210 KIAS (MEA 2500), THEN ON TRACK 049.95. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 32 : FROM EKEKE ON TRACK 123.76/14.27 TO CROSS FRENY AT OR ABOVE 7000 AND AT 230 KIAS (MEA 2600), THEN ON TRACK 139.56/5.20 TO CROSS PNFLD AT 6000 AND AT 210 KIAS (MEA 2500), THEN ON TRACK 139.49/7.00 TO ZASNI (MEA 2500), THEN ON TRACK 139.49. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED

NOTE: RNAV 1

NOTE: DME/DME/IRU OR GPS REQUIRED

NOTE: Expect descend via clearance and landing direction assignment by Indianapolis Center. Approach will assign landing Rwy.

FIXES AND/OR HOLDING PATTERNS:

COMMUNICATIONS:

IND APP CON, ATIS

AIRPORTS SERVED:

INDIANAPOLIS INTL, INDIANAPOLIS, IN

LOST COMMUNICATIONS PROCEDURE:

CHART LOST COMMUNICATION: IN THE EVENT OF LOST COMMUNICATION PRIOR TO RUNWAY ASSIGNMENT, EXECUTE ILS OR LOC RWY 23R APPROACH.

REMARKS:



US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
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 depiction attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
KOLTS (RNAV)	TWO	KOLTS.KOLTS2	ONE	05 Mar 2015	10 NOV 2016

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)
 REFERENCE MAGNETIC VARIATION = KIND 05W/2015

FLIGHT INSPECTED BY:

Edward W Mesa
 Name

FICO
 Organization

07/29/2016
 Date

Digitally signed by
JACOB POWERS
 Sep 12, 2016

Signature

DEVELOPED BY:

Thomas Dury
 Name

Airspace and Procedures Manager, Indianapolis
 ARTCC
 Organization

06/10/2016
 Date

Digitally signed by
Patrick Mulqueen

Signature

APPROVED BY:

Patrick J Mulqueen Jr
 Name

Manager, AJV-5442
 Organization

06/10/2016
 Date

Digitally signed by
Patrick Mulqueen

Signature

CHANGES:

1. Remove Runway 14 Transition and TTOMY and KEADY WPs from procedure.
2. Remove OIILL WP from procedure and moved the end of the common route down track to EKEKE.
3. Added speed restriction of 230 KIAS at MRRRK and FRENY WPs.
4. Added Lost Communication instructions.
5. Moved CIRGO WP 3 NM W to N39 50' 47.26" W086 52' 32.08".
6. Make EKEKE WP the end of the common route.
7. Added "Expect descend via clearance" note.
8. Changed crossing restriction at KOLTS from At/Above FL240 to FL240BFL260.

REASONS:

1. Runway 14 transition not feasible considering airspace constraints and the operational requirement for runway assignment to be issued 10 NM prior to the end of the common route.
2. OIILL WP no longer needed; Common route needed to be extended into IND airspace for operational needs.
3. ATC request to manage compression.
4. ATC and industry request to manage crew expectations and provide standard procedures in the event of lost communication.
5. WP moved to 4 NM from airspace boundary for future facility coordination needs.
6. ATC request due to operational need to issue runway assignment 10 NM prior to the end of the common route.
7. ATC request to mitigate pilot requests for clearance and runway assignments.
8. ATC request to mitigate identical back to back altitude restrictions and keep aircraft below ORD and MDW southbound departure traffic.



US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
STAR (DATA RECORD)

Arrival Name KOLTS (RNAV)	Number TWO	STAR Computer Code KOLTS.KOLTS2	Superseded Number ONE	Dated 05 Mar 2015	Effective Date 10 NOV 2016
-------------------------------------	----------------------	---	---------------------------------	-----------------------------	--------------------------------------

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
------------	----------	---	-------	----------	----	-----------	----------	-------	---------

En Route Transition

JAAVE	395025.89N / 0881517.00W	Y		IF					JAAVE.KOLTS2
KOLTS	395027.18N / 0880531.52W	Y	FB	TF	089.78	07.52	FL240BFL260		

En Route Transition

USIRE	395023.04N / 0894039.06W	Y		IF					USIRE.KOLTS2
JAAVE	395025.89N / 0881517.00W	Y	FB	TF	089.50	65.76			
KOLTS	395027.18N / 0880531.52W	Y	FB	TF	089.78	07.52	FL240BFL260		

Common Route

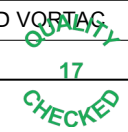
KOLTS	395027.18N / 0880531.52W	Y		IF			FL240BFL260		KOLTS.KOLTS2
GARTE	395026.25N / 0873327.05W	Y	FB	TF	089.86	24.71			
CIRGO	395047.26N / 0865232.08W	Y	FB	TF	089.15	31.52	AT/ABOVE 11000		
EKEKE	395050.30N / 0864208.88W	Y	FB	TF	089.58	08.00	AT/ABOVE 10000		

Runway Transition

EKEKE	395050.30N / 0864208.88W	Y		IF			AT/ABOVE 10000		
GAZPA	395115.69N / 0862635.00W	Y	FB	TF	087.90	11.99	AT/ABOVE 7000	AT 230K	
PETYN	394717.16N / 0862136.14W	Y	FB	TF	135.96	05.52	AT 6000	AT 210K	
WANOB	394154.25N / 0862822.81W	Y	FO	TF	224.23	07.50			
KIND:RWY 05L				FM	224.23				RECOMMENDED NAVAID: ROD VORTAC

Runway Transition

EKEKE	395050.30N / 0864208.88W	Y		IF			AT/ABOVE 10000		
GAZPA	395115.69N / 0862635.00W	Y	FB	TF	087.90	11.99	AT/ABOVE 7000	AT 230K	
PETYN	394717.16N / 0862136.14W	Y	FB	TF	135.96	05.52	AT 6000	AT 210K	
WANOB	394154.25N / 0862822.81W	Y	FO	TF	224.23	07.50			
KIND:RWY 05R				FM	224.23				RECOMMENDED NAVAID: ROD VORTAC



US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
STAR (DATA RECORD)

Arrival Name KOLTS (RNAV)	Number TWO	STAR Computer Code KOLTS.KOLTS2	Superseded Number ONE	Dated 05 Mar 2015	Effective Date 10 NOV 2016
-------------------------------------	----------------------	---	---------------------------------	-----------------------------	--------------------------------------

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
Runway Transition									
EKEKE	395050.30N / 0864208.88W	Y		IF			AT/ABOVE 10000		
MRRRK	394844.30N / 0862957.37W	Y	FB	TF	102.53	09.62	AT/ABOVE 7000	AT 230K	
PETYN	394717.16N / 0862136.14W	Y	FB	TF	102.66	06.60	AT 6000	AT 210K	
ZOSAR	395153.24N / 0861538.30W	Y	FO	TF	044.95	06.50	AT 6000	AT 210K	
KIND:RWY 23L				FM	044.95				RECOMMENDED NAVAID: ROD VORTAC

Runway Transition									
EKEKE	395050.30N / 0864208.88W	Y		IF			AT/ABOVE 10000		
MRRRK	394844.30N / 0862957.37W	Y	FB	TF	102.53	09.62	AT/ABOVE 7000	AT 230K	
PETYN	394717.16N / 0862136.14W	Y	FB	TF	102.66	06.60	AT 6000	AT 210K	
ZOSAR	395153.24N / 0861538.30W	Y	FO	TF	044.95	06.50	AT 6000	AT 210K	
KIND:RWY 23R				FM	044.95				RECOMMENDED NAVAID: ROD VORTAC

Runway Transition									
EKEKE	395050.30N / 0864208.88W	Y		IF			AT/ABOVE 10000		
FRENY	394356.91N / 0862556.18W	Y	FB	TF	118.76	14.27	AT/ABOVE 7000	AT 230K	
PNFLD	394017.94N / 0862108.52W	Y	FB	TF	134.56	05.20	AT 6000	AT 210K	
ZASNI	393523.19N / 0861440.95W	Y	FO	TF	134.49	07.00			
KIND:RWY 32				FM	134.49				RECOMMENDED NAVAID: ROD VORTAC

