

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.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
MBELL (RNAV)	FIVE	JIINN.MBELL5	FOUR	08/15/2019	

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
BUMPY	BUMPY.MBELL5	BUMPY	BUMPY						
			PENBE	039.84	81.45	10000	2500		
			XXTRA	074.60	33.53	10000	2500		
			JIINN	103.70	46.12	10000	2500		BETWEEN 14000 AND 16000
IMOUT	IMOUT.MBELL5	IMOUT	IMOUT						
			VENMO	101.42	36.48	10000	2500		
			XXTRA	126.48	43.55	10000	2500		
			JIINN	103.70	46.12	10000	2500		BETWEEN 14000 AND 16000
MOOCH	MOOCH.MBELL5	MOOCH	MOOCH						
			PENBE	070.41	92.25	10000	2600		
			XXTRA	074.60	33.53	10000	2500		
			JIINN	103.70	46.12	10000	2500		BETWEEN 14000 AND 16000
PENBE	PENBE.MBELL5	PENBE	PENBE						
			XXTRA	074.60	33.53	10000	2500		
			JIINN	103.70	46.12	10000	2500		BETWEEN 14000 AND 16000

ARRIVAL ROUTE DESCRIPTION:

KSDF: FROM JIINN ON TRACK 082.93/9.52 TO CROSS MBELL BETWEEN 13000 AND 15000.

LANDING KSDF RWY 17L/R: FROM MBELL ON TRACK 018.88/7.00 TO CROSS AABZ BETWEEN 11000 AND 13000, THEN ON TRACK 019.01/7.00 TO CROSS BLEEM BETWEEN 9000 AND 11000, THEN ON TRACK 033.82/7.16 TO CROSS GLENM BETWEEN 7000 AND 9000, THEN ON TRACK 052.29/7.00 TO CROSS AUDRY BETWEEN 6000 AND 7000, THEN ON TRACK 052.33/4.00 TO CROSS BEEKK AT 6000, THEN ON TRACK 052.36/8.10 TO TROLI, THEN ON TRACK 351.00/3.27 TO CROSS PDUDL AT 6000, THEN ON TRACK 351.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KSDF RWY 29: FROM MBELL ON TRACK 100.52/7.00 TO CROSS LOKBL BETWEEN 11000 AND 13000, THEN ON TRACK 099.93/7.00 TO CROSS LIYAH BETWEEN 9000 AND 11000, THEN ON TRACK 100.36/7.00 TO CROSS PRKER BETWEEN 7000 AND 9000, THEN ON TRACK 100.45/7.00 TO CROSS KYSEN AT 6000, THEN ON TRACK 062.69/5.75 TO SHLEY, THEN ON TRACK 026.00/15.54 TO CROSS FARNK AT 6000, THEN ON TRACK 116.09/7.01 TO CROSS MAYLN AT 6000, THEN ON TRACK 117.78. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KSDF RWY 35L: FROM MBELL ON TRACK 100.52/7.00 TO CROSS LOKBL BETWEEN 11000 AND 13000, THEN ON TRACK 099.93/7.00 TO CROSS LIYAH BETWEEN 9000 AND 11000, THEN ON TRACK 100.36/7.00 TO CROSS PRKER BETWEEN 7000 AND 9000, THEN ON TRACK 100.45/7.00 TO CROSS KYSEN AT 6000, THEN ON TRACK 072.17/5.95 TO RNNR, THEN ON TRACK 010.39/4.89 TO CROSS BRBON AT 6000. EXPECT ILS OR LOC RWY 35L APPROACH.

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LANDING KSDF RWY 35R: FROM MBELL ON TRACK 100.52/7.00 TO CROSS LOKBL BETWEEN 11000 AND 13000, THEN ON TRACK 099.93/7.00 TO CROSS LIYAH BETWEEN 9000 AND 11000, THEN ON TRACK 100.36/7.00 TO CROSS PRKER BETWEEN 7000 AND 9000, THEN ON TRACK 100.45/7.00 TO CROSS KYSEN AT 6000, THEN ON TRACK 072.17/5.95 TO RNNR, THEN ON TRACK 020.15/5.29 TO CROSS MEEKO AT 6000. EXPECT ILS OR LOC RWY 35R APPROACH.

LANDING KJVV: FROM JIINN ON TRACK 082.93/9.52 TO CROSS MBELL BETWEEN 13000 AND 15000, THEN ON TRACK 018.88/7.00 TO CROSS AABZ BETWEEN 11000 AND 13000, THEN ON TRACK 019.01/7.00 TO CROSS BLEEM BETWEEN 9000 AND 11000, THEN ON TRACK 019.16/4.14 TO CROSS DOWNS BETWEEN 7000 AND 9000, THEN ON TRACK 030.15/8.65 TO CROSS SIPPN AT 5000, THEN ON TRACK 030.15. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KLOU: FROM JIINN ON TRACK 082.93/9.52 TO CROSS MBELL BETWEEN 13000 AND 15000, THEN ON TRACK 100.52/7.00 TO CROSS LOKBL BETWEEN 11000 AND 13000, THEN ON TRACK 099.93/7.00 TO CROSS LIYAH BETWEEN 9000 AND 11000, THEN ON TRACK 100.36/7.00 TO CROSS PRKER BETWEEN 7000 AND 9000, THEN ON TRACK 100.45/8.06 TO CROSS MOWGN AT 6000, THEN ON TRACK 090.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED

PROCEDURAL DATA NOTES:

NOTE: JET AIRCRAFT ONLY

NOTE: PENBE TRANSITION ATC ASSIGNED ONLY

NOTE: KSDF LANDING NORTH SELECT RWY 35L TRANSITION. EXPECT RUNWAY ASSIGNMENT FROM LOUISVILLE APP CON PRIOR TO JIINN.

NOTE: KSDF LANDING SOUTH SELECT RWY 17R TRANSITION. EXPECT RUNWAY ASSIGNMENT FROM LOUISVILLE APP CON PRIOR TO JIINN.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT MOOCH: HOLD W, RT, 070.41 INBOUND, 10 NM LEGS.

CHART HOLDING AT BUMPY: HOLD SW, RT, 039.84 INBOUND, 10 NM LEGS.

CHART HOLDING AT IMOUT: HOLD W, RT, 101.42 INBOUND, 10 NM LEGS.

COMMUNICATIONS:

CHART: LOUISVILLE APP CON

AIRPORTS SERVED:

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
KSDF	LOUISVILLE	KY
KLOU	LOUISVILLE	KY
KJVV	JEFFERSONVILLE	IN

LOST COMMUNICATIONS PREFERENCES:

REMARKS:

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MBELL (RNAV)	FIVE	JIINN.MBELL5	FOUR	08/15/2019	

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)
MAG VAR: KSDF 05W/2020.
CHART AT PDUDL TERMINUS: KSDF LDG RWY 17L/R.
CHART AT MAYLN TERMINUS: KSDF LDG RWY 29.
CHART AT BRBON TERMINUS: KSDF LDG RWY 35L.
CHART AT MEEKO TERMINUS: KSDF LDG RWY 35R.
CHART AT SIPPN TERMINUS: LDG KJVY.
CHART AT MOWGN TERMINUS: LDG KLOU.

FLIGHT INSPECTED BY:

JEFFREY ECKMAN

ORGANIZATION:

FPO

DATE:

04/25/2024

Flight Inspected Signature:

Digitally signed by

ALLAN WILL

May 13, 2024

Digitally signed by

ALLAN WILL

May 13, 2024

DEVELOPED BY:

JEFFREY W. CHESTER

ZID

3/7/2024

Developed By Signature:

Digitally signed by

ALLAN WILL

May 13, 2024

APPROVED BY:

ALLAN WILL

AJV-A423

Approved By Signature:

CHANGES:

1. TRANSITION ROUTES: DELETED MYTON AND WANAV TRANSITION ROUTES.
2. TRANSITION ROUTES: ADDED BUMPY, IMOUT, MOOCH, AND PENBE TRANSITIONS.
3. ARRIVAL ROUTE DESCRIPTION: COMPLETE REDESIGN OF ALL COMMON ROUTES AND RUNWAY TRANSITIONS - ADDED ARRIVAL ROUTES TO KJVY AND KLOU.
4. PBN REQUIREMENT NOTES: ADDED RNAV 1 – DME/DME/IRU OR GPS AND REMOVED RNAV 1 AND DME/DME/IRU OR GPS REQUIRED FROM PROCEDURAL DATA NOTES.
5. PROCEDURAL DATA NOTES: ADDED NOTE: PENBE TRANSITION ATC ASSIGNED ONLY.
6. PROCEDURAL DATA NOTES: CHANGED TURBOJET TO JET.
7. REMOVED HOLDING AT MBELL; ADDED HOLDING AT MOOCH, BUMPY, IMOUT; REMOVED STAND-ALONE FIXES QARRY, SCARY AND IIU VORTAC.
8. COMMUNICATIONS: REMOVED LOUISVILLE ATIS.
9. AIRPORTS SERVED: UPDATED FROM LOUISVILLE MUHAMMAD ALI INTL, LOUISVILLE, KY TO SDF LOUISVILLE KY; AND ADDED LOU LOUISVILLE KY; AND JVV JEFFERSONVILLE IN.
10. LOST COMMUNICATIONS - REMOVED LOST COMMUNICATIONS PROCEDURES.
11. REMOVED LANDING NOTES AT CURNL, CURRT, AND SQWRL.
12. CHARTED TERMINUS DATA FOR RWY TRANSITIONS.
13. REMARKS: REMOVED DEPICT SCARY OFFSET FROM FM LEG AFTER CURNL TO AVOID AIRCREW MISUNDERSTANDING. DEPICT QARRY OFFSET FROM FM LEG AFTER CURRT TO AVOID AIRCREW MISUNDERSTANDING. ABBREVIATED AMENDMENT, DOES NOT SATISFY PERIODIC REVIEW REQUIREMENTS.
14. PROCEDURAL DATA NOTES: ADDED CHART NOTE: KSDF LANDING NORTH SELECT RWY 35L TRANSITION. EXPECT RUNWAY ASSIGNMENT FROM LOUISVILLE APP CON PRIOR TO JIINN.
15. PROCEDURAL DATA NOTES: ADDED CHART NOTE: KSDF LANDING SOUTH SELECT RWY 17R TRANSITION. EXPECT RUNWAY ASSIGNMENT FROM LOUISVILLE APP CON PRIOR TO JIINN.
16. REMOVED RECOMMENDED NAVAID FROM 17.2.

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MBELL (RNAV)	FIVE	JIINN.MBELL5	FOUR	08/15/2019	

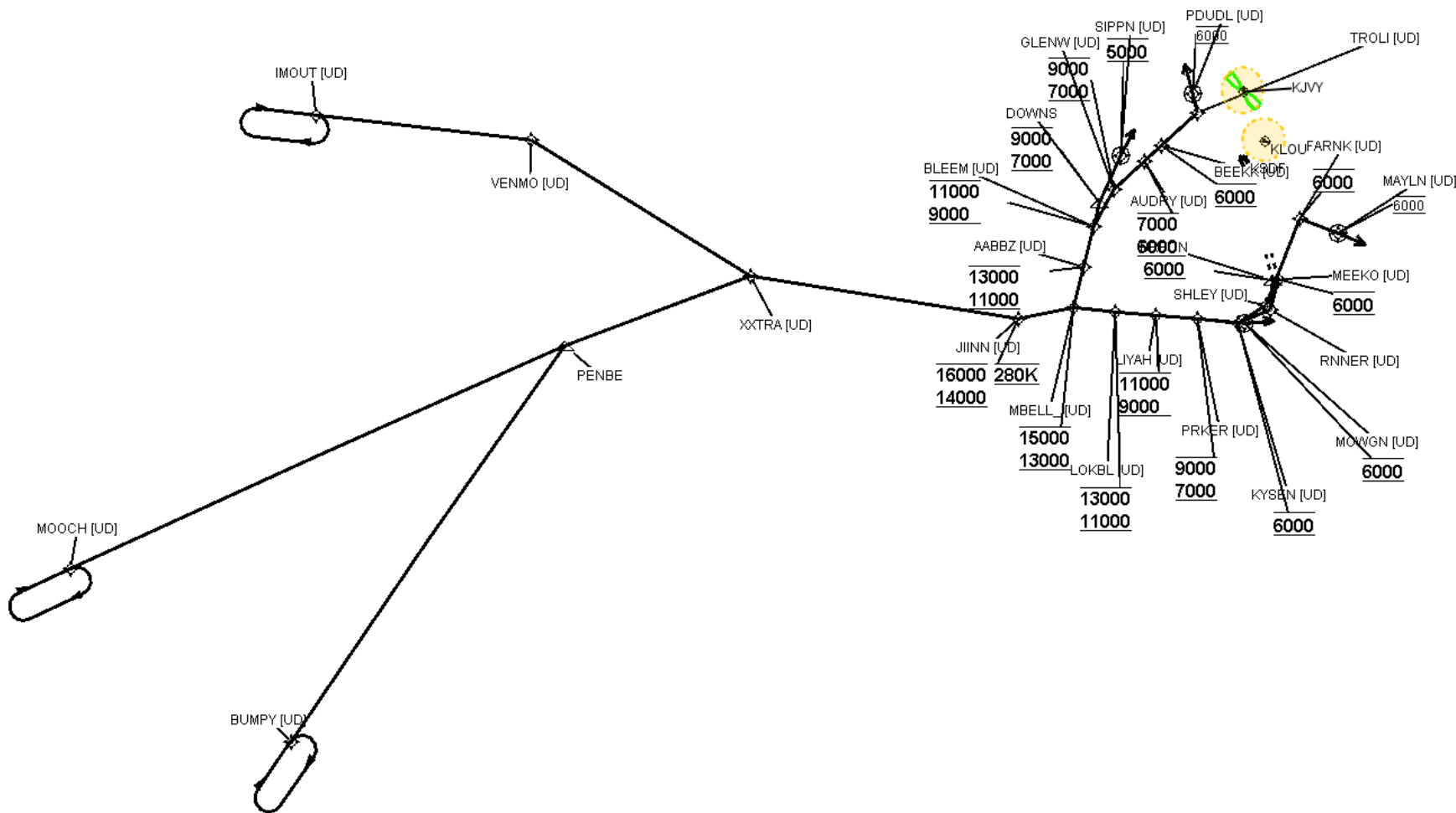
REASONS:

- 1-3, 5, 8-11. ATC REQUESTED DESIGN.
- 4,6. CURRENT DOCUMENTATION CRITERIA.
- 7. AUTOCHARTED (FOR ATIS).
- 12. 8260.19I 4-5-2H(2).
- 13. ATC REQUEST – FIXES REMOVED.
- 14, 15. ATC REQUEST.
- 16. NO LONGER REQUIRED.

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MBELL (RNAV)	FIVE	JIINN.MBELL5	FOUR	08/15/2019	
Graphic Depiction 1					



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STAR (DATA RECORD)

Arrival Name MBELL (RNAV)	Number FIVE		STAR Computer Code JIINN.MBELL5		Superseded Number FOUR		Dated 08/15/2019		Effective Date
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
En Route Transition									
BUMPY	363233.80N / 0890807.11W	Y		IF					BUMPY.MBELL5
PENBE	373915.51N / 0880931.42W	Y	FB	TF	034.84	81.45			
XXTRA	375050.77N / 0872950.92W	Y	FB	TF	069.60	33.53			
JIINN	374337.44N / 0863223.00W	Y	FB	TF	098.70	46.12	14000B16000	AT 280K	
En Route Transition									
IMOUT	381800.60N / 0890245.21W	Y		IF					IMOUT.MBELL5
VENMO	381346.37N / 0881644.61W	Y	FB	TF	096.42	36.48			
XXTRA	375050.77N / 0872950.92W	Y	FB	TF	121.48	43.55			
JIINN	374337.44N / 0863223.00W	Y	FB	TF	098.70	46.12	14000B16000	AT 280K	
En Route Transition									
MOOCH	370136.01N / 0895509.27W	Y		IF					MOOCH.MBELL5
PENBE	373915.51N / 0880931.42W	Y	FB	TF	065.41	92.25			
XXTRA	375050.77N / 0872950.92W	Y	FB	TF	069.60	33.53			
JIINN	374337.44N / 0863223.00W	Y	FB	TF	098.70	46.12	14000B16000	AT 280K	
En Route Transition									
PENBE	373915.51N / 0880931.42W	Y		IF					PENBE.MBELL5
XXTRA	375050.77N / 0872950.92W	Y	FB	TF	069.60	33.53			
JIINN	374337.44N / 0863223.00W	Y	FB	TF	098.70	46.12	14000B16000	AT 280K	
Common Route									
JIINN	374337.44N / 0863223.00W	Y		IF			14000B16000	AT 280K	JIINN.MBELL5
MBELL	374536.42N / 0862038.61W	Y	FB	TF	077.93	09.52	13000B15000		
Common Route									
JIINN	374337.44N / 0863223.00W	Y		IF			14000B16000	AT 280K	JIINN.MBELL5
MBELL	374536.42N / 0862038.61W	Y	FB	TF	077.93	09.52	13000B15000		

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STAR (DATA RECORD)

Arrival Name MBELL (RNAV)		Number FIVE		STAR Computer Code JIINN.MBELL5		Superseded Number FOUR		Dated 08/15/2019	Effective Date
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
AABBZ	375224.60N / 0861831.36W	Y	FB	TF	013.88	07.00	11000B13000		
BLEEM	375912.54N / 0861622.70W	Y	FB	TF	014.01	07.00	9000B11000		
DOWNS	380313.83N / 0861505.70W	Y	FB	TF	014.16	04.14	7000B9000		
SIPPN	381103.99N / 0861025.97W	Y	FO	TF	025.15	08.65	AT 5000		
KJVV				FM	025.15				
Common Route									
JIINN	374337.44N / 0863223.00W	Y		IF			14000B16000	AT 280K	JIINN.MBELL5
MBELL	374536.42N / 0862038.61W	Y	FB	TF	077.93	09.52	13000B15000		
LOKBL	374455.63N / 0861151.52W	Y	FB	TF	095.52	07.00	11000B13000		
LIYAH	374419.14N / 0860303.97W	Y	FB	TF	094.93	07.00	9000B11000		
PRKER	374339.52N / 0855416.88W	Y	FB	TF	095.36	07.00	7000B9000		
MOWGN	374253.09N / 0854410.13W	Y	FO	TF	095.45	08.06	AT 6000		
KLOU				FM	085.00				
Runway Transition									
MBELL	374536.42N / 0862038.61W	Y		IF			13000B15000		
AABBZ	375224.60N / 0861831.36W	Y	FB	TF	013.88	07.00	11000B13000		
BLEEM	375912.54N / 0861622.70W	Y	FB	TF	014.01	07.00	9000B11000		
GLENM	380529.19N / 0861200.44W	Y	FB	TF	028.82	07.16	7000B9000		
AUDRY	381014.23N / 0860529.12W	Y	FB	TF	047.29	07.00	6000B7000		
BEEKK	381257.02N / 0860145.22W	Y	FB	TF	047.33	04.00	AT 6000		
TROLI	381826.45N / 0855410.78W	Y	FB	TF	047.36	08.10			
PDUDL	382136.83N / 0855511.07W	Y	FO	TF	346.00	03.27	AT 6000		
KSDF:RWY 17L,RWY 17R				FM	346.00				
Runway Transition									
MBELL	374536.42N / 0862038.61W	Y		IF			13000B15000		
LOKBL	374455.63N / 0861151.52W	Y	FB	TF	095.52	07.00	11000B13000		

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STAR (DATA RECORD)

Arrival Name MBELL (RNAV)		Number FIVE		STAR Computer Code JIINN.MBELL5		Superseded Number FOUR		Dated 08/15/2019	Effective Date
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
LIYAH	374419.14N / 0860303.97W	Y	FB	TF	094.93	07.00	9000B11000		
PRKER	374339.52N / 0855416.88W	Y	FB	TF	095.36	07.00	7000B9000		
KYSEN	374259.25N / 0854529.95W	Y	FB	TF	095.45	07.00	AT 6000		
SHLEY	374603.72N / 0853922.22W	Y	FB	TF	057.69	05.75			
FARNK	380034.88N / 0853219.51W	Y	FB	TF	021.00	15.54	AT 6000		
MAYLN	375803.04N / 0852403.14W	Y	FO	TF	111.09	07.01	AT 6000		
KSDF:RWY 29				FM	112.78				
Runway Transition									
MBELL	374536.42N / 0862038.61W	Y		IF			13000B15000		
LOKBL	374455.63N / 0861151.52W	Y	FB	TF	095.52	07.00	11000B13000		
LIYAH	374419.14N / 0860303.97W	Y	FB	TF	094.93	07.00	9000B11000		
PRKER	374339.52N / 0855416.88W	Y	FB	TF	095.36	07.00	7000B9000		
KYSEN	374259.25N / 0854529.95W	Y	FB	TF	095.45	07.00	AT 6000		
RNNER	374517.73N / 0853835.12W	Y	FB	TF	067.17	05.95			
BRBON	375009.94N / 0853800.33W	Y	FB	TF	005.39	04.89	AT 6000		
KSDF:RWY 35L									
Runway Transition									
MBELL	374536.42N / 0862038.61W	Y		IF			13000B15000		
LOKBL	374455.63N / 0861151.52W	Y	FB	TF	095.52	07.00	11000B13000		
LIYAH	374419.14N / 0860303.97W	Y	FB	TF	094.93	07.00	9000B11000		
PRKER	374339.52N / 0855416.88W	Y	FB	TF	095.36	07.00	7000B9000		
KYSEN	374259.25N / 0854529.95W	Y	FB	TF	095.45	07.00	AT 6000		
RNNER	374517.73N / 0853835.12W	Y	FB	TF	067.17	05.95			
MEEKO	375024.32N / 0853650.43W	Y	FB	TF	015.15	05.29	AT 6000		
KSDF:RWY 35R									