

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Arrival Name BRWNZ (RNAV)	Number ONE	STAR Computer Code BRWNZ.BRWNZ1	Superseded Number NONE	Dated	Effective Date				
TRANSITION ROUTES:									
Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
DOZRR	DOZRR.BRWNZ1	DOZRR	DOZRR						
			BRWNZ	193.96	10.09	10000	2800		BETWEEN 10000 AND 14000
HASTE	HASTE.BRWNZ1	HASTE	HASTE						
			MNZEL	120.25	19.92	10000	3000		
			KWYNN	124.60	52.60	10000	3000		
			FRYYE	125.23	18.18	10000	2200		AT/ABOVE FL240
			MCKOY	103.69	10.25	10000	2100		AT/ABOVE FL210
			WEEDN	103.93	07.81	10000	3100		AT/ABOVE FL190
			RDZON	104.08	07.01	10000	3200		AT/ABOVE 17000
			WINNZ	112.78	09.47	10000	1900		AT/ABOVE 14000
			GOLIC	112.79	07.28	10000	2800		
			BRWNZ	112.76	10.04	10000	2800		BETWEEN 10000 AND 14000
LOGGR	LOGGR.BRWNZ1	LOGGR	LOGGR						
			DETMR	099.57	45.44	10000	2500		
			FRYYE	102.27	78.84	10000	2600		AT/ABOVE FL240
			MCKOY	103.69	10.25	10000	2100		AT/ABOVE FL210
			WEEDN	103.93	07.81	10000	3100		AT/ABOVE FL190
			RDZON	104.08	07.01	10000	3200		AT/ABOVE 17000
			WINNZ	112.78	09.47	10000	1900		AT/ABOVE 14000
			GOLIC	112.79	07.28	10000	2800		
			BRWNZ	112.76	10.04	10000	2800		BETWEEN 10000 AND 14000
OLYEE	OLYEE.BRWNZ1	OLYEE	OLYEE						
			SCHAM	112.51	19.43	10000	3000		
			HAVEN	112.74	37.33	10000	3000		
			KWYNN	141.90	34.01	10000	3100		
			FRYYE	125.23	18.18	10000	2200		AT/ABOVE FL240
			MCKOY	103.69	10.25	10000	2100		AT/ABOVE FL210

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Arrival Name <b>BRWNZ (RNAV)</b>		Number <b>ONE</b>		STAR Computer Code <b>BRWNZ.BRWNZ1</b>	Superseded Number <b>NONE</b>			Dated	Effective Date
Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
			WEEDN	103.93	07.81	10000	3100		AT/ABOVE FL190
			RDZON	104.08	07.01	10000	3200		AT/ABOVE 17000
			WINNZ	112.78	09.47	10000	1900		AT/ABOVE 14000
			GOLIC	112.79	07.28	10000	2800		
			BRWNZ	112.76	10.04	10000	2800		BETWEEN 10000 AND 14000
WINNZ	WINNZ.BRWNZ1	WINNZ	WINNZ						AT/ABOVE 14000
			GOLIC	112.79	07.28	10000	2800		
			BRWNZ	112.76	10.04	10000	2800		BETWEEN 10000 AND 14000
ZIINE	ZIINE.BRWNZ1	ZIINE	ZIINE						
			BENJO	089.60	49.75	10000	2300		
			COWCH	092.54	41.68	10000	2600		
			FRYYE	092.85	42.49	10000	2600		AT/ABOVE FL240
			MCKOY	103.69	10.25	10000	2100		AT/ABOVE FL210
			WEEDN	103.93	07.81	10000	3100		AT/ABOVE FL190
			RDZON	104.08	07.01	10000	3200		AT/ABOVE 17000
			WINNZ	112.78	09.47	10000	1900		AT/ABOVE 14000
			GOLIC	112.79	07.28	10000	2800		
			BRWNZ	112.76	10.04	10000	2800		BETWEEN 10000 AND 14000

**ARRIVAL ROUTE DESCRIPTION:**

LANDING KCLE RWY 06R/L: FROM BRWNZ ON TRACK 181.43/12.61 TO MAAAK, THEN ON TRACK 181.31/6.61 TO CROSS KLLAY BETWEEN 5000 AND 7000, THEN ON TRACK 181.53/5.81 TO CROSS JIIMM BETWEEN 5000 AND 6000, THEN ON TRACK 182.24/4.01 TO CROSS HICKR AT 5000 AND AT 210 KIAS, THEN ON HEADING 241.00 OR AS ASSIGNED BY ATC. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KCLE RWY 10: FROM BRWNZ ON TRACK 181.43/12.61 TO MAAAK, THEN ON TRACK 185.97/7.47 TO CROSS TAMDE AT OR ABOVE 4000 AND AT 210 KIAS. EXPECT RNAV (GPS) RWY 10 APPROACH.

LANDING KCLE RWY 24R/L: FROM BRWNZ ON TRACK 129.95/14.13 TO TRRKY, THEN ON TRACK 130.45/4.07 TO CROSS QUUBE BETWEEN 5000 AND 7000, THEN ON TRACK 129.74/3.16 TO CROSS DEEKN BETWEEN 5000 AND 6000, THEN ON TRACK 130.30/4.01 TO CROSS LLROY AT 5000 AND AT 210 KIAS, THEN ON HEADING 056.00 OR AS ASSIGNED BY ATC. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KCLE RWY 28: FROM BRWNZ ON TRACK 129.95/14.13 TO TRRKY, THEN ON TRACK 145.40/5.26 TO CROSS DYXON AT 7000, THEN ON TRACK 145.45/12.64 TO CROSS OZZYY AT 7000 AND AT 210 KIAS, THEN ON HEADING 101.00 OR AS ASSIGNED BY ATC. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KAKR/1G3: FROM BRWNZ ON TRACK 151.47/50.26 TO CROSS USASN AT 10000, THEN ON TRACK 100.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KBKL/KLNN/KCGF/KLPR: FROM BRWNZ ON TRACK 104.44/16.01 TO SLOTR, THEN ON TRACK 104.59/9.81 TO CROSS SIPE AT 7000, THEN ON TRACK 104.59. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KCAK: FROM BRWNZ ON TRACK 151.47/50.26 TO CROSS USASN AT 10000, THEN ON TRACK 120.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
<b>BRWNZ (RNAV)</b>	<b>ONE</b>	<b>BRWNZ.BRWNZ1</b>	<b>NONE</b>		

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED

NOTE: RNAV 1

NOTE: DME/DME/IRU OR GPS REQUIRED

NOTE: JET AIRCRAFT EXPECT "DESCEND VIA" CLEARANCE FROM CLEVELAND CENTER.

NOTE: CLE LANDING SOUTH: USE RWY 24R TRANSITION, EXPECT RUNWAY ASSIGNMENT PRIOR TO GOLIC OR DOZRR.

NOTE: CLE LANDING NORTH: USE RWY 6L TRANSITION, EXPECT RUNWAY ASSIGNMENT PRIOR TO GOLIC OR DOZRR.

NOTE: OLYEE TRANSITION: DO NOT FILE - TO BE ASSIGNED BY ATC.

NOTE: DOZRR TRANSITION: DO NOT FILE - TO BE ASSIGNED BY ATC.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT BRWNZ: HOLD NW, LT, 112.76 INBOUND, 10 NM LEGS.

CHART HOLDING AT DETMR: HOLD W, LT, 099.57 INBOUND, 10 NM LEGS.

CHART HOLDING AT FRYYE: HOLD W, LT, 103.69 INBOUND, 10 NM LEGS.

COMMUNICATIONS:

CLEVELAND APP CON, CLE ATIS, BKL ATIS, CAK ATIS

AIRPORTS SERVED:

CLEVELAND-HOPKINS INTL, CLEVELAND, OH (KCLE)

AKRON FULTON INTL, AKRON, OH (KAKR)

AKRON-CANTON RGNL, AKRON, OH (KCAK)

BURKE LAKEFRONT, CLEVELAND, OH (KBKL)

CUYAHOGA COUNTY, CLEVELAND, OH (KCGF)

KENT STATE UNIV, KENT, OH (1G3)

LORAIN COUNTY RGNL, LORAIN/ELYRIA, OH (KLPR)

WILLOUGHBY LOST NATION MUNI, WILLOUGHBY, OH (KLNN)

LOST COMMUNICATIONS PROCEDURE:

REMARKS:

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)

REFERENCE MAGNETIC VARIATION = KCLE 08W/2020

CHART AT USASN TERMINUS: LDG KCAK, 1G3, KAKR

CHART AT SIPE TERMINUS: LDG KBKL, KCGF, KLNN, KLPR

DO NOT CHART MOCAs.



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<b>BRWNZ (RNAV)</b>	<b>ONE</b>	<b>BRWNZ.BRWNZ1</b>	<b>NONE</b>		
CHART AT HICKR TERMINUS: KCLE LDG RWY 6L/R					
CHART AT TAMDE TERMINUS: KCLE LDG RWY 10					
CHART AT LLROY TERMINUS: KCLE LDG RWY 24L/R					
CHART AT OZZYY TERMINUS: KCLE LDG RWY 28					

FLIGHT INSPECTED BY:

Name

Organization

Date

Signature

DEVELOPED BY:

MIKE FERRELL

CLEVELAND ARTCC METROPLEX LEAD

30 AUG 2017

Signature

APPROVED BY:

MARLON J. ROBINSON, MANAGER

AJV-5440

Name

Organization

Date

Signature

CHANGES:

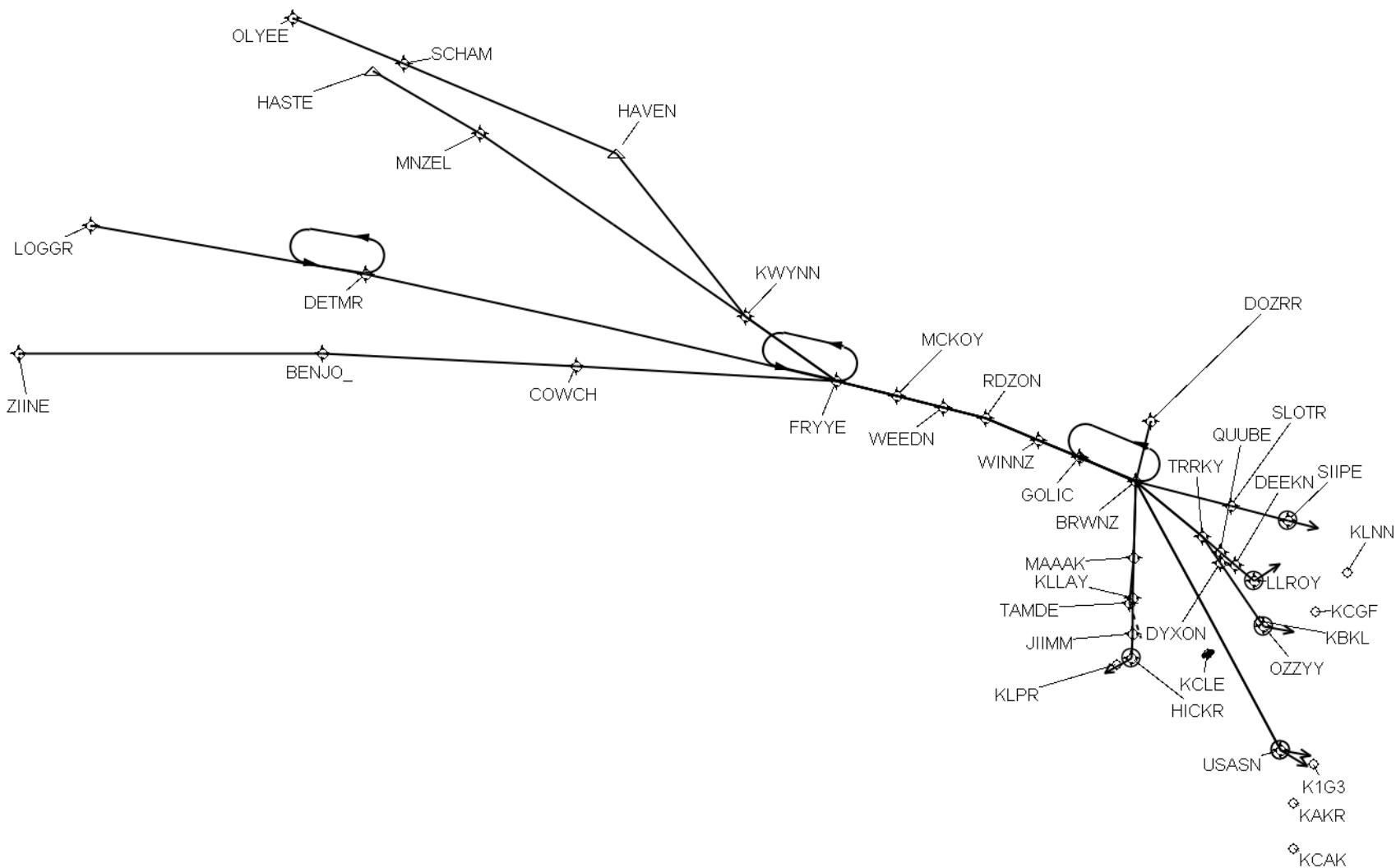
REASONS:

QUALITY  
14  
CHECKED

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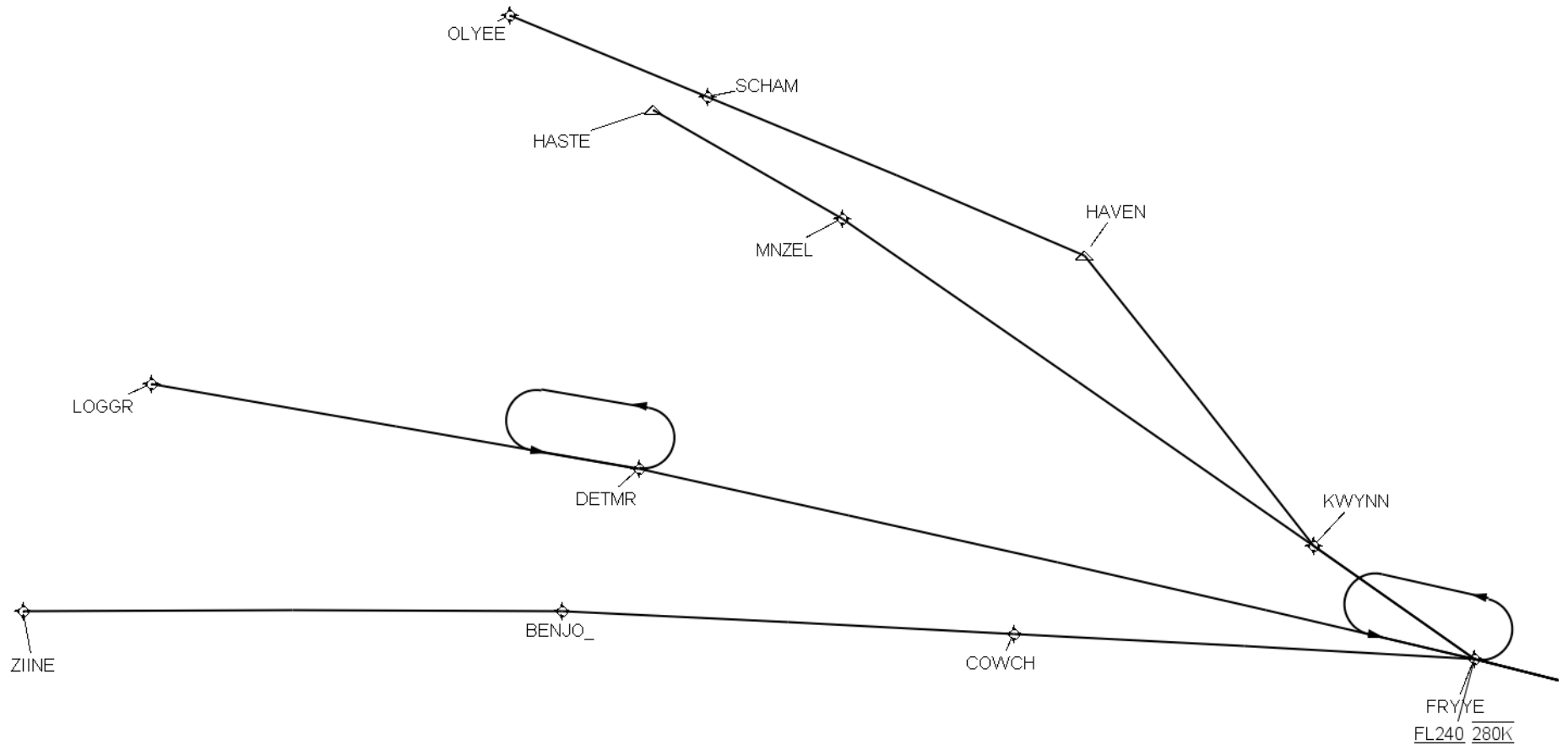
Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
<b>BRWNZ (RNAV)</b>	<b>ONE</b>	<b>BRWNZ.BRWNZ1</b>	<b>NONE</b>		
<b>Graphic Depiction 1</b>					



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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
<b>BRWNZ (RNAV)</b>	<b>ONE</b>	<b>BRWNZ.BRWNZ1</b>	<b>NONE</b>		
<b>Graphic Depiction 2</b>					

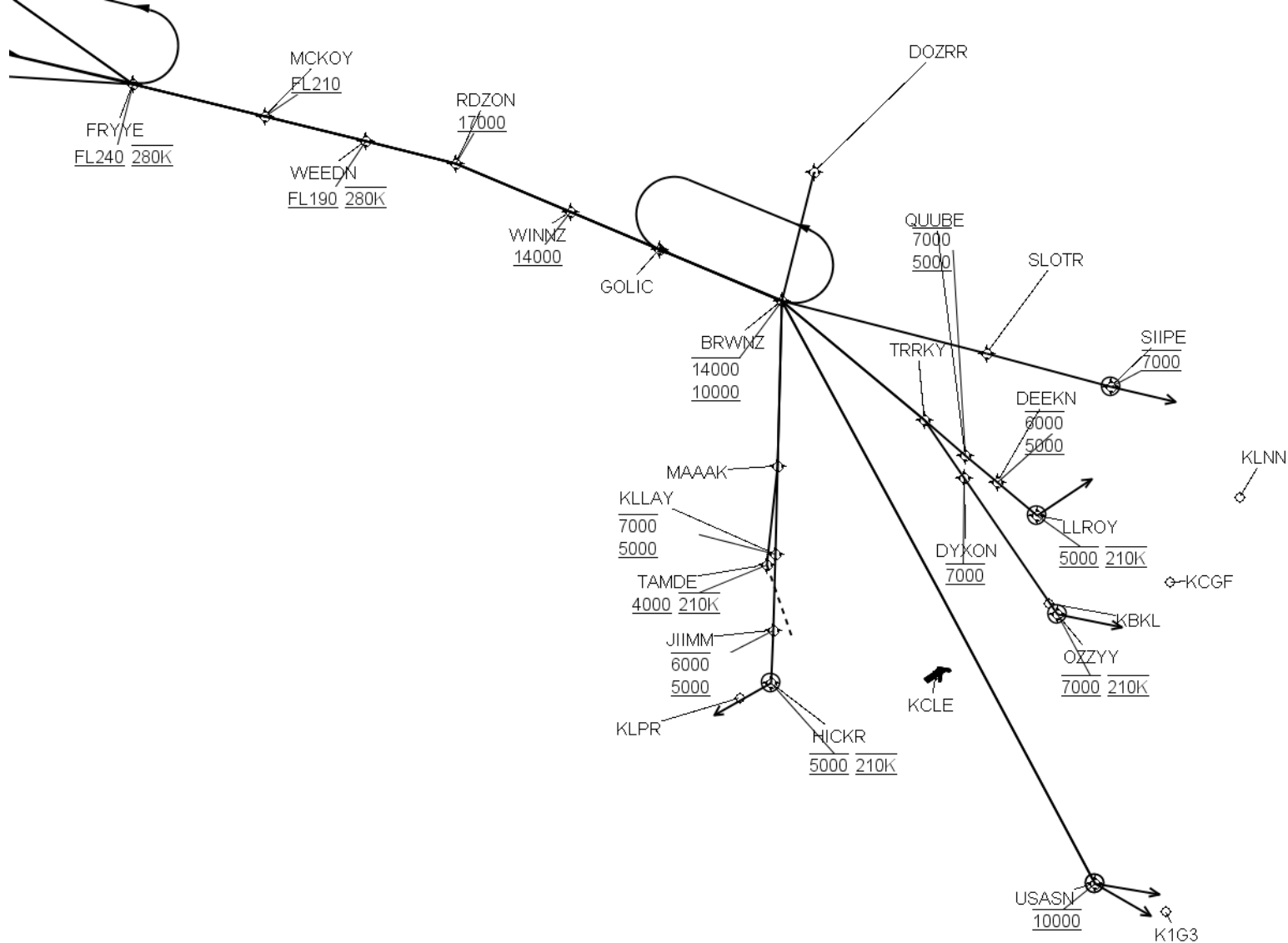


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Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
<b>BRWNZ (RNAV)</b>	<b>ONE</b>	<b>BRWNZ.BRWNZ1</b>	<b>NONE</b>		

Graphic Depiction 3



FEDERAL AVIATION ADMINISTRATION  
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STAR (DATA RECORD)

Arrival Name BRWNZ (RNAV)		Number ONE		STAR Computer Code BRWNZ.BRWNZ1		Superseded Number NONE		Dated	Effective Date
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
DOZRR	420102.69N / 0821040.65W	Y		IF					DOZRR.BRWNZ1
BRWNZ	415100.43N / 0821204.69W	Y	FB	TF	185.96	10.09	10000B14000		
En Route Transition									
HASTE	424015.43N / 0851002.50W	Y		IF					HASTE.BRWNZ1
MNZEL	423240.02N / 0844505.69W	Y	FB	TF	112.25	19.92			
KWYNN	420849.08N / 0834152.01W	Y	FB	TF	116.60	52.60			
FRYYE	420027.89N / 0832011.22W	Y	FB	TF	117.23	18.18	AT/ABOVE FL240	AT 280K	
MCKOY	415926.14N / 0830630.86W	Y	FB	TF	095.69	10.25	AT/ABOVE FL210		
WEEDN	415837.27N / 0825605.98W	Y	FB	TF	095.93	07.81	AT/ABOVE FL190	AT 280K	
RDZON	415752.34N / 0824645.45W	Y	FB	TF	096.08	07.01	AT/ABOVE 17000		
WINNZ	415526.66N / 0823429.63W	Y	FB	TF	104.78	09.47	AT/ABOVE 14000		
GOLIC	415334.65N / 0822503.86W	Y	FB	TF	104.79	07.28			
BRWNZ	415100.43N / 0821204.69W	Y	FB	TF	104.76	10.04	10000B14000		
En Route Transition									
LOGGR	420839.57N / 0860641.42W	Y		IF					LOGGR.BRWNZ1
DETMR	420708.54N / 0850538.99W	Y	FB	TF	091.57	45.44			
FRYYE	420027.89N / 0832011.22W	Y	FB	TF	094.27	78.84	AT/ABOVE FL240	AT 280K	
MCKOY	415926.14N / 0830630.86W	Y	FB	TF	095.69	10.25	AT/ABOVE FL210		
WEEDN	415837.27N / 0825605.98W	Y	FB	TF	095.93	07.81	AT/ABOVE FL190	AT 280K	
RDZON	415752.34N / 0824645.45W	Y	FB	TF	096.08	07.01	AT/ABOVE 17000		
WINNZ	415526.66N / 0823429.63W	Y	FB	TF	104.78	09.47	AT/ABOVE 14000		
GOLIC	415334.65N / 0822503.86W	Y	FB	TF	104.79	07.28			
BRWNZ	415100.43N / 0821204.69W	Y	FB	TF	104.76	10.04	10000B14000		
En Route Transition									
OLYEE	424704.67N / 0852910.01W	Y		IF					OLYEE.BRWNZ1
SCHAM	424209.63N / 0850339.20W	Y	FB	TF	104.51	19.43			



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STAR (DATA RECORD)

Arrival Name BRWNZ (RNAV)		Number ONE		STAR Computer Code BRWNZ.BRWNZ1		Superseded Number NONE		Dated	Effective Date
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
HAVEN	423229.24N / 0841448.81W	Y	FB	TF	104.74	37.33			
KWYNN	420849.08N / 0834152.01W	Y	FB	TF	133.90	34.01			
FRYYE	420027.89N / 0832011.22W	Y	FB	TF	117.23	18.18	AT/ABOVE FL240	AT 280K	
MCKOY	415926.14N / 0830630.86W	Y	FB	TF	095.69	10.25	AT/ABOVE FL210		
WEEDN	415837.27N / 0825605.98W	Y	FB	TF	095.93	07.81	AT/ABOVE FL190	AT 280K	
RDZON	415752.34N / 0824645.45W	Y	FB	TF	096.08	07.01	AT/ABOVE 17000		
WINNZ	415526.66N / 0823429.63W	Y	FB	TF	104.78	09.47	AT/ABOVE 14000		
GOLIC	415334.65N / 0822503.86W	Y	FB	TF	104.79	07.28			
BRWNZ	415100.43N / 0821204.69W	Y	FB	TF	104.76	10.04	10000B14000		
En Route Transition									
WINNZ	415526.66N / 0823429.63W	Y		IF			AT/ABOVE 14000		WINNZ.BRWNZ1
GOLIC	415334.65N / 0822503.86W	Y	FB	TF	104.79	07.28			
BRWNZ	415100.43N / 0821204.69W	Y	FB	TF	104.76	10.04	10000B14000		
En Route Transition									
ZIINE	414611.17N / 0861826.72W	Y		IF					ZIINE.BRWNZ1
BENJO	415308.45N / 0851233.15W	Y	FB	TF	081.60	49.75			
COWCH	415653.14N / 0841657.02W	Y	FB	TF	084.54	41.68			
FRYYE	420027.89N / 0832011.22W	Y	FB	TF	084.85	42.49	AT/ABOVE FL240	AT 280K	
MCKOY	415926.14N / 0830630.86W	Y	FB	TF	095.69	10.25	AT/ABOVE FL210		
WEEDN	415837.27N / 0825605.98W	Y	FB	TF	095.93	07.81	AT/ABOVE FL190	AT 280K	
RDZON	415752.34N / 0824645.45W	Y	FB	TF	096.08	07.01	AT/ABOVE 17000		
WINNZ	415526.66N / 0823429.63W	Y	FB	TF	104.78	09.47	AT/ABOVE 14000		
GOLIC	415334.65N / 0822503.86W	Y	FB	TF	104.79	07.28			
BRWNZ	415100.43N / 0821204.69W	Y	FB	TF	104.76	10.04	10000B14000		

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STAR (DATA RECORD)

Arrival Name BRWNZ (RNAV)	Number ONE	STAR Computer Code BRWNZ.BRWNZ1		Superseded Number NONE		Dated	Effective Date		
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
Common Route									
BRWNZ	415100.43N / 0821204.69W	Y		IF			10000B14000		BRWNZ.BRWNZ1
USASN	411028.84N / 0813227.68W	Y	FO	TF	143.47	50.26	AT 10000		
K1G3,KAKR				FM	092.00				RECOMMENDED NAVAID: EWC VORTAC
Common Route									
BRWNZ	415100.43N / 0821204.69W	Y		IF			10000B14000		BRWNZ.BRWNZ1
SLOTR	414910.66N / 0815047.94W	Y	FB	TF	096.44	16.01			
SIPE	414802.30N / 0813745.77W	Y	FO	TF	096.59	09.81	AT 7000		
KBKL,KCGF,KLNN, KLPR				FM	096.59				RECOMMENDED NAVAID: EWC VORTAC
Common Route									
BRWNZ	415100.43N / 0821204.69W	Y		IF			10000B14000		BRWNZ.BRWNZ1
USASN	411028.84N / 0813227.68W	Y	FO	TF	143.47	50.26	AT 10000		
KCAK				FM	112.00				RECOMMENDED NAVAID: EWC VORTAC
Runway Transition									
BRWNZ	415100.43N / 0821204.69W	Y		IF			10000B14000		
MAAAK	413828.36N / 0821009.18W	Y	FB	TF	173.43	12.61			
KLLAY	413154.26N / 0820907.66W	Y	FB	TF	173.31	06.61	5000B7000		
JIIIM	412607.51N / 0820815.43W	Y	FB	TF	173.53	05.81	5000B6000		
HICKR	412208.00N / 0820743.36W	Y	FO	TF	174.24	04.01	AT 5000	AT 210K	
KCLE:RWY 6L,RWY 6R				VM	233.00				
Runway Transition									
BRWNZ	415100.43N / 0821204.69W	Y		IF			10000B14000		
MAAAK	413828.36N / 0821009.18W	Y	FB	TF	173.43	12.61			

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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
TAMDE	413100.06N / 0820948.02W	Y	FB	TF	177.97	07.47	AT/ABOVE 4000	AT 210K	
KCLE:RWY 10									
Runway Transition									
BRWNZ	415100.43N / 0821204.69W	Y		IF			10000B14000		
TRRKY	414330.40N / 0815603.92W	Y	FB	TF	121.95	14.13			
QUUBE	414119.29N / 0815129.06W	Y	FB	TF	122.45	04.07	5000B7000		
DEEKN	413939.34N / 0814753.74W	Y	FB	TF	121.74	03.16	5000B6000		
LLROY	413730.61N / 0814322.58W	Y	FO	TF	122.30	04.01	AT 5000	AT 210K	
KCLE:RWY 24L,RWY 24R				VM	048.00				
Runway Transition									
BRWNZ	415100.43N / 0821204.69W	Y		IF			10000B14000		
TRRKY	414330.40N / 0815603.92W	Y	FB	TF	121.95	14.13			
DYXON	413937.69N / 0815118.72W	Y	FB	TF	137.40	05.26	AT 7000		
OZZYY	413018.32N / 0813956.47W	Y	FO	TF	137.45	12.64	AT 7000	AT 210K	
KCLE:RWY 28				VM	093.00				

