

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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
<b>CBUSS (RNAV)</b>	<b>TWO</b>	<b>BUGZZ.CBUSS2</b>	<b>ONE</b>	<b>08/12/2021</b>	<b>2 DEC 2021</b>

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
WWSHR	WWSHR.CBUSS2	WWSHR	WWSHR						
			WAAHU	208.60	45.64	10000	3000		
			BUGZZ	207.79	04.46	4000	3000		

ARRIVAL ROUTE DESCRIPTION:

KCMH: FROM BUGZZ ON TRACK 202.43/14.91 TO CROSS CBUSS BETWEEN 8000 AND 12000.

LANDING KCMH RWY 10L: FROM CBUSS ON TRACK 232.61/11.89 TO CROSS GARMM BETWEEN 8000 AND 9000, THEN ON TRACK 232.70/5.79 TO CROSS TAMOE BETWEEN 6000 AND 7000, THEN ON TRACK 232.50/2.69 TO FLIIP, THEN ON TRACK 280.96/3.00 TO CROSS WILGO AT 6000 AND AT 210 KIAS, THEN ON TRACK 280.96. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KCMH RWY 10R: FROM CBUSS ON TRACK 232.61/11.89 TO CROSS GARMM BETWEEN 8000 AND 9000, THEN ON TRACK 232.70/5.79 TO CROSS TAMOE BETWEEN 6000 AND 7000, THEN ON TRACK 232.50/2.69 TO FLIIP, THEN ON TRACK 280.96/3.00 TO CROSS WILGO AT 6000 AND AT 210 KIAS, THEN ON TRACK 280.96. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KCMH RWY 28L: FROM CBUSS ON TRACK 202.27/12.00 TO MOLLS, THEN ON TRACK 199.81/5.12 TO CROSS NHERD AT 5000 AND AT 210 KIAS, THEN ON TRACK 199.81. EXPECT RADAR VECTORS TO ILS OR LOC RWY 28L APPROACH.

LANDING KCMH RWY 28R: FROM CBUSS ON TRACK 202.27/12.00 TO MOLLS, THEN ON TRACK 204.59/4.61 TO CROSS FAVUS AT 5000 AND AT 210 KIAS, THEN ON TRACK 204.59. EXPECT RADAR VECTORS TO ILS OR LOC RWY 28R APPROACH.

LANDING KLCK: FROM BUGZZ ON TRACK 170.04/7.86 TO CROSS THORO AT 6000, THEN ON TRACK 170.04. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KOSU: FROM BUGZZ ON TRACK 201.51/6.82 TO AGING, THEN ON TRACK 201.48/5.18 TO CROSS RIGEE AT 5000, THEN ON TRACK 201.48. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KTZR: FROM BUGZZ ON TRACK 201.51/6.82 TO AGING, THEN ON TRACK 246.00/9.34 TO CROSS CATUG AT 4000, THEN ON TRACK 246.00. 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: KCMH AIRCRAFT LANDING EAST EXPECT RWY10L

NOTE: KCMH AIRCRAFT LANDING WEST EXPECT RWY28R

FIXES AND/OR HOLDING PATTERNS:

COMMUNICATIONS:

CHART: COLUMBUS APPROACH CONTROL

AIRPORTS SERVED:

JOHN GLENN COLUMBUS INTL, COLUMBUS, OH (KCMH)

BOLTON FIELD, COLUMBUS, OH (KTZR)

OHIO STATE UNIVERSITY, COLUMBUS, OH (KOSU)

RICKENBACKER INTL, COLUMBUS, OH (KLCK)

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LOST COMMUNICATIONS PROCEDURE:

REMARKS:

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)  
REFERENCE MAGNETIC VARIATION = KCMH 07W/2015  
CHART AT WILGO TERMINUS: LDG KCMH RWY10L AND RWY10R  
CHART AT NHERD TERMINUS: LDG KCMH RWY28L  
CHART AT FAVUS TERMINUS: LDG KCMH RWY28R  
CHART AT THORO TERMINUS: LDG KLCK  
CHART AT RIGEE TERMINUS: LDG KOSU  
CHART AT CATUG TERMINUS: LDG KTZR

FLIGHT INSPECTED BY:

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO  
DATED 07/07/2021, SUBJECT: GUIDANCE FOR PROCEDURAL  
CHANGES REQUIRING FLIGHT INSPECTION VALIDATION

Name

Organization

Date

*Digitally signed by*

**ALLAN WILL**

Sep 08, 2021

Signature

*Digitally signed by*

**ALLAN WILL**

Sep 08, 2021

Signature

*Digitally signed by*

**ALLAN WILL**

Sep 08, 2021

Signature

DEVELOPED BY:

JEFFREY CHESTER, AIRSPACE AND PROCEDURES  
MANAGER

Name

INDIANAPOLIS ARTCC

Organization

09/07/2021

Date

APPROVED BY:

MARLON ROBINSON, MANAGER

Name

AJV-A420

Organization

Date

CHANGES:

1. CHANGED PBN EQUIPMENT REQUIREMENT NOTE FROM RNP 1 - DME/DME/IRU OR GPS TO RNAV 1 - DME/DME/IRU OR GPS

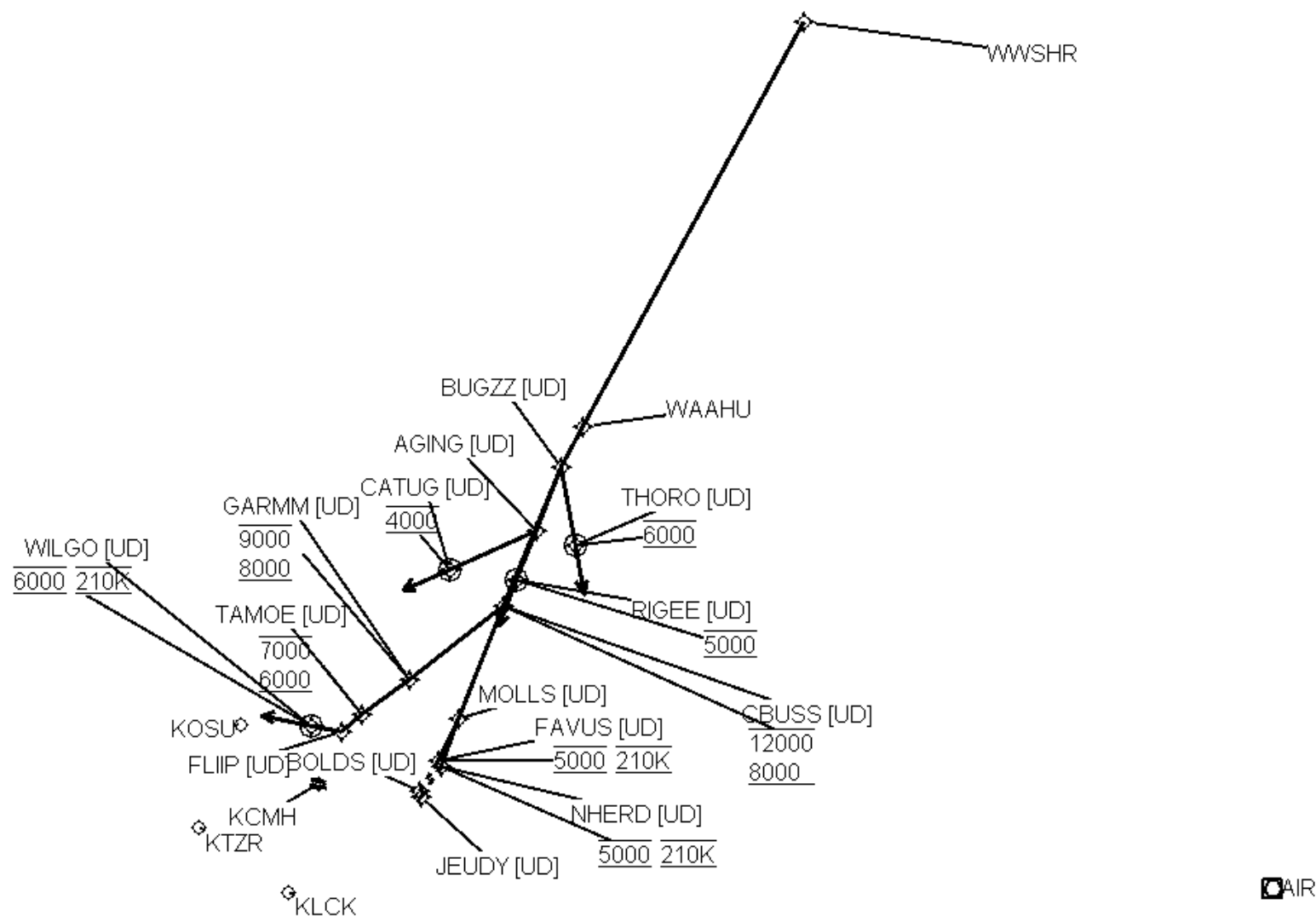
REASONS:

1. IAW 8260.19I, 4-5-3.

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<b>Graphic Depiction 1</b>					



FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STAR (DATA RECORD)

Arrival Name CBUSS (RNAV)		Number TWO		STAR Computer Code BUGZZ.CBUSS2		Superseded Number ONE		Dated 08/12/2021	Effective Date 2 DEC 2021
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
WWSHR	412034.09N / 0820305.76W	Y		IF					WWSHR.CBUSS2
WAAHU	403804.21N / 0822510.09W	Y	FB	TF	201.60	45.64			
BUGZZ	403354.04N / 0822714.64W	Y	FB	TF	200.79	04.46			
Common Route									
BUGZZ	403354.04N / 0822714.64W	Y		IF					BUGZZ.CBUSS2
CBUSS	401931.09N / 0823225.84W	Y	FB	TF	195.43	14.91	8000B12000		
Common Route									
BUGZZ	403354.04N / 0822714.64W	Y		IF					BUGZZ.CBUSS2
THORO	402622.38N / 0822414.35W	Y	FO	TF	163.04	07.86	AT 6000		
KLCK				FM	163.04				
Common Route									
BUGZZ	403354.04N / 0822714.64W	Y		IF					BUGZZ.CBUSS2
AGING	402717.59N / 0822928.93W	Y	FB	TF	194.51	06.82			
RIGEE	402216.45N / 0823110.63W	Y	FO	TF	194.48	05.18	AT 5000		
KOSU				FM	194.48				
Common Route									
BUGZZ	403354.04N / 0822714.64W	Y		IF					BUGZZ.CBUSS2
AGING	402717.59N / 0822928.93W	Y	FB	TF	194.51	06.82			
CATUG	402228.31N / 0823957.27W	Y	FO	TF	239.00	09.34	AT 4000		
KTZR				FM	239.00				
Runway Transition									
CBUSS	401931.09N / 0823225.84W	Y		IF			8000B12000		
GARMM	401111.31N / 0824330.77W	Y	FB	TF	225.61	11.89	8000B9000		
TAMOE	400708.36N / 0824854.86W	Y	FB	TF	225.70	05.79	6000B7000		



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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
FLIIP	400514.99N / 0825125.05W	Y	FB	TF	225.50	02.69			
WILGO	400527.37N / 0825519.20W	Y	FO	TF	273.96	03.00	AT 6000	AT 210K	
KCMH:RWY 10L				FM	273.96				
Runway Transition									
CBUSS	401931.09N / 0823225.84W	Y		IF			8000B12000		
GARMM	401111.31N / 0824330.77W	Y	FB	TF	225.61	11.89	8000B9000		
TAMOE	400708.36N / 0824854.86W	Y	FB	TF	225.70	05.79	6000B7000		
FLIIP	400514.99N / 0825125.05W	Y	FB	TF	225.50	02.69			
WILGO	400527.37N / 0825519.20W	Y	FO	TF	273.96	03.00	AT 6000	AT 210K	
KCMH:RWY 10R				FM	273.96				
Runway Transition									
CBUSS	401931.09N / 0823225.84W	Y		IF			8000B12000		
MOLLS	400755.68N / 0823633.10W	Y	FB	TF	195.27	12.00			
NHERD	400256.08N / 0823801.75W	Y	FO	TF	192.81	05.12	AT 5000	AT 210K	
KCMH:RWY 28L				FM	192.81				
Runway Transition									
CBUSS	401931.09N / 0823225.84W	Y		IF			8000B12000		
MOLLS	400755.68N / 0823633.10W	Y	FB	TF	195.27	12.00			
FAVUS	400332.06N / 0823821.88W	Y	FO	TF	197.59	04.61	AT 5000	AT 210K	
KCMH:RWY 28R				FM	197.59				