

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Arrival Name RAYZZ (RNAV)	Number THREE	STAR Computer Code RAYZZ.RAYZZ3	Superseded Number TWO	Dated 12/02/2021	Effective Date
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TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
CHRGE	CHRGE.RAYZZ3	CHRGE	CHRGE						
			DAAWG	091.84	48.83	10000	1700	AT/BELOW FL210	
			RAYZZ	089.70	39.86	10000	1700	AT 10000	
CIGAR	CIGAR.RAYZZ3	CIGAR	CIGAR						
			DAAWG	069.77	51.02	10000	1700	AT/BELOW FL210	
			RAYZZ	089.70	39.86	10000	1700	AT 10000	
DAAWG	DAAWG.RAYZZ3	DAAWG	DAAWG						AT/BELOW FL210
			RAYZZ	089.70	39.86	10000	1700	AT 10000	

ARRIVAL ROUTE DESCRIPTION:

TPA: FROM RAYZZ ON TRACK 068.34/19.80 TO HIDOS.

LANDING TPA RWY 1L/R: FROM HIDOS ON TRACK 110.58/12.16 TO CBASS, THEN ON TRACK 187.04/6.40 TO CROSS TOOTH AT 5000 AND AT 210 KIAS, THEN ON TRACK 187.00/3.60 TO BUGGO, THEN ON TRACK 187.00/5.00 TO CROSS FELOM AT 5000 AND AT 210 KIAS, THEN ON TRACK 187.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING TPA RWY 28, 10: FROM HIDOS ON TRACK 093.11/5.89 TO BAYAD, THEN ON HEADING 095.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING TPA RWY 19L/R: FROM HIDOS ON TRACK 093.29/11.88 TO ENTAH, THEN ON TRACK 005.00/5.00 TO CROSS VENNU AT 5000 AND AT 210 KIAS, THEN ON TRACK 006.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING CLW/PIE/MCF/SPG/TPF/VDF/LAL: FROM RAYZZ ON TRACK 089.76/7.32 TO SHKRA, THEN ON TRACK 089.76. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING SRQ: FROM RAYZZ ON TRACK 136.71/11.45 TO ALROE, THEN ON TRACK 137.58/7.94 TO MAHAR, THEN ON TRACK 137.58. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING VNC: FROM RAYZZ ON TRACK 136.71/11.45 TO ALROE, THEN ON TRACK 149.64/7.46 TO COVUM, THEN ON TRACK 149.64. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS. FROM CHRGE OR CIGAR: RNAV 1- GPS.

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED

PROCEDURAL DATA NOTES:

NOTE: JET AND TURBOPROP AIRCRAFT ONLY

NOTE: TPA PRIMARY LANDING RWYs 1L/R, 19L/R.

NOTE: TPA LANDING NORTH: EXPECT RADAR VECTORS PRIOR TO FELOM.

NOTE: TPA LANDING SOUTH: EXPECT RADAR VECTORS PRIOR TO VENNU.

NOTE: LANDING CLW, LAL, MCF, PIE, SPG, TPF AND VDF: EXPECT RADAR VECTORS PRIOR TO SHKRA.

NOTE: LANDING SRQ: EXPECT RADAR VECTORS PRIOR TO MAHAR.

NOTE: LANDING VNC: EXPECT RADAR VECTORS PRIOR TO COVUM.

NOTE: DAAWG TRANSITION, ATC ASSIGNED ONLY.



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RAYZZ (RNAV)	THREE	RAYZZ.RAYZZ3	TWO	12/02/2021	

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT DAAWG: HOLD W, RT, 091.84 INBOUND, 10 NM LEGS.
 CHART HOLDING AT RAYZZ: HOLD W, RT, 089.70 INBOUND, 10 NM LEGS.
 CHART: FADDI, LAGOO.

COMMUNICATIONS:

AIRPORTS SERVED:

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
TPA	TAMPA	FL
SPG	ST PETERSBURG	FL
CLW	CLEARWATER	FL
LAL	LAKELAND	FL
MCF	TAMPA	FL
TPF	TAMPA	FL
SRQ	SARASOTA/BRADENTON	FL
PIE	ST PETERSBURG-CLEARWATER	FL
VDF	TAMPA	FL
VNC	VENICE	FL

LOST COMMUNICATIONS PREFERENCES:

TPA LANDING NORTH: AFTER FELOM, PROCEED TO LAGOO, THEN PROCEED ON THE RWY 1L APPROACH.
 TPA LANDING SOUTH: AFTER VENNU, PROCEED TO FADDI, THEN PROCEED ON THE RWY 19R APPROACH.

REMARKS:

THE ENVIRONMENTAL REVIEW UNDER ORDER 1050.1 (LATEST EDITION) AND THE NOISE SCREENING HAVE BEEN ACCOMPLISHED.
 295' SHIP HEIGHT EVALUATED OVER OPEN WATER.
 LOWEST ASSIGNED ATC ALTITUDE AT BAYAD, 2000.
 LOWEST ASSIGNED ATC ALTITUDE AT COVUM, 2000.
 LOWEST ASSIGNED ATC ALTITUDE AT MAHAR, 2000.
 LOWEST ASSIGNED ATC ALTITUDE AT SHKRA, 2000.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)
 MAG VAR: TPA 05W/2010
 CHART AT VENNU TERMINUS: TPA LDG RWY 19L/R
 CHART AT FELOM TERMINUS: TPA LDG RWY 1L/R
 CHART AT BAYAD TERMINUS: TPA LDG RWY 10/28



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RAYZZ (RNAV)	THREE	RAYZZ.RAYZZ3	TWO	12/02/2021	
CHART AT SHKRA TERMINUS: LDG CLW,LAL,MCF,PIE,SPG,TPF,VDF					
CHART AT MAHAR TERMINUS: LDG SRQ					
CHART AT COVUM TERMINUS: LDG VNC					

FLIGHT INSPECTED BY:

KEVIN RIESE

ORGANIZATION: **DATE:**

AJF 01/17/2025

Flight Inspected Signature:

Digitally signed by

ROBERT G HAMILTON

Jan 24, 2025

DEVELOPED BY:

Joey Tinsley, NATCA / Reginald E. Davis, FAA
 MANAGEMENT

ESC OSG PBN
 SOUTH TEAM 09/05/24

Developed By Signature:

Digitally signed by

ROBERT G HAMILTON

Jan 24, 2025

APPROVED BY:

BEV BORDY

AJV-A430

Approved By Signature:

Digitally signed by

ROBERT G HAMILTON

Jan 24, 2025

CHANGES:

1. ADDED KSPG, KCLW, KTPF TO AIRPORTS SERVED.
2. AMENDED CHART NOTE: from "Landing LAL,MCF,PIE and VDF: Expect RADAR vectors prior to SHKRA." to "Landing CLW, LAL, MCF, PIE, SPG, TPF and VDF: Expect RADAR vectors prior to SHKRA."
3. REMOVED "OR AS ASSIGNED BY ATC" FROM RWY 10/28 TRANSITION.
4. REMOVED AIRPORT NAME FROM AIRPORTS SERVED AND ADDED AIRPORT ID; REMOVED K IDENT FROM 17.1 FORM.
5. UPDATED LANGUAGE IN LOST COMMUNICATIONS PREFERENCES.
6. CHANGED MEA AT DAAWG FROM FL180 TO 10000.
7. REMOVED REMARK CHRGE TO DAAWG MEA FL180 FOR COMM AND DME/DME/IRU SOLUTIONS.
8. ADDED REMARKS FOR THE LOWEST ASSIGNED ATC ALTITUDES AT BAYAD, COVUM, MAHAR, AND SHKRA, 2000
9. ADDED SPG, CLW, AND TPF TO SHKRA COMMON ROUTE AND TO THE EXPECT RADAR VECTORS PRIOR TO SHKRA NOTE.
10. ADDED SPG, CLW, AND TPF TO SHKRA TERMINUS IN ADDITIONAL FLIGHT DATA.
11. REFORMATTED DO NOT FILE NOTE TO READ DAAWG TRANSITION, ATC ASSIGNED ONLY.
12. REWORDED LOST COMMUNICATION PREFERENCES.

REASONS:

- 1-2. ATC REQUEST, EXPECTED LOSS OF BRIDGE NINE STAR.
3. CHARTING CRITERIA.
4. CURRENT DOCUMENTATION STANDARDS.
5. UPDATED IAW 8260.19J PARA 4-5-12h(1)
- 6-7. COMM AND DME/DME/IRU SAT AT 10000.
8. AFS REQUIREMENT WHEN NO ALTITUDE IS SPECIFIED AT THE TERMINUS FIX.
- 9-10. ATC REQUEST.
11. FORMAT UPDATE IAW 8260.19J PARA 4-5-12(d)3(b).
12. REWORDED TO REMOVE VERBIAGE THAT COULD BE MISTAKEN FOR A CODED ROUTE IAW 8260.19J PARA 4-5-12o(4).

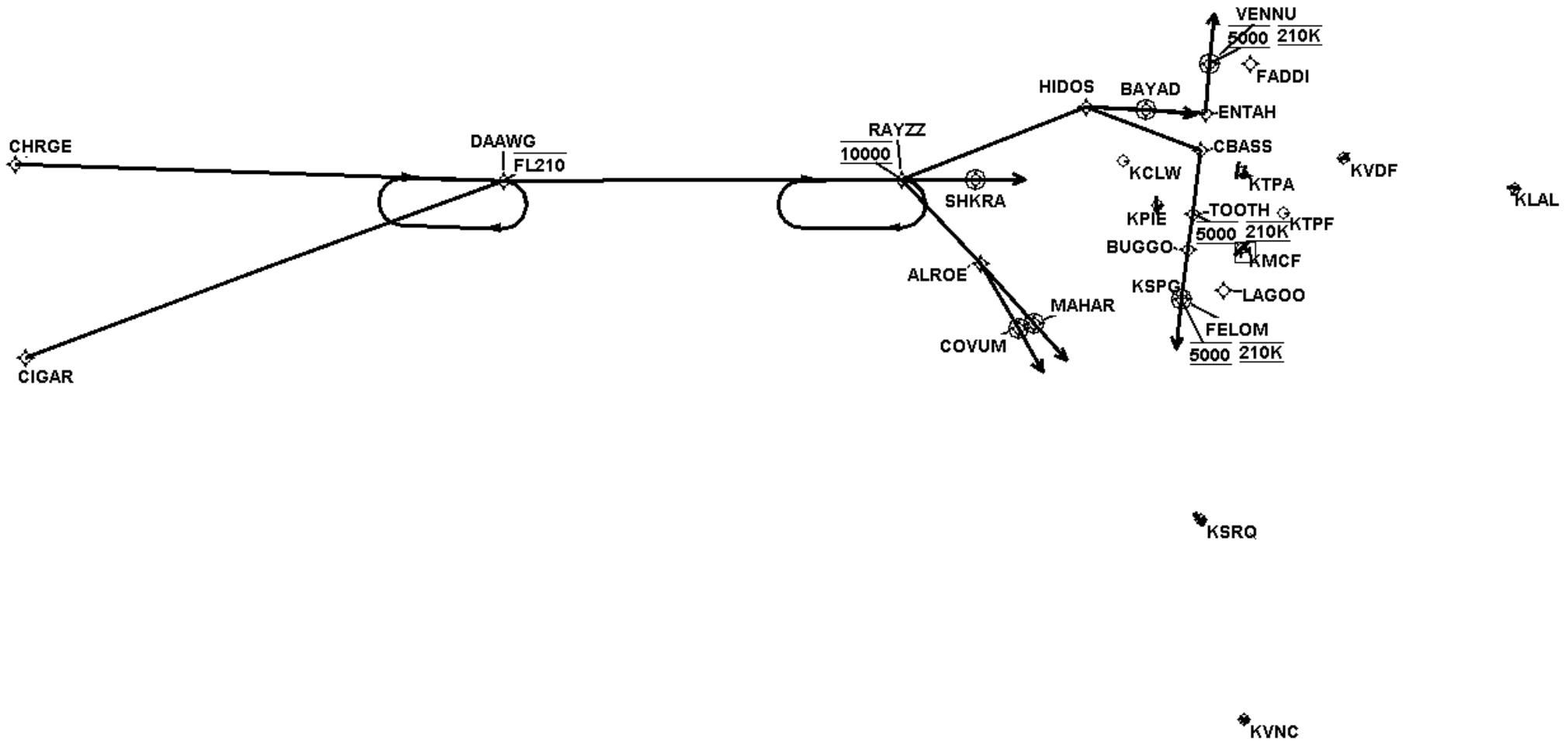


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RAYZZ (RNAV)	THREE	RAYZZ.RAYZZ3	TWO	12/02/2021	

Graphic Depiction 1



FEDERAL AVIATION ADMINISTRATION
 FLIGHT STANDARDS SERVICE
 STAR (DATA RECORD)

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date				
RAYZZ (RNAV)	THREE	RAYZZ.RAYZZ3	TWO	12/02/2021					
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
CHRG	274844.48N / 0844955.93W	Y		IF					CHRG.RAYZZ3
DAAWG	275115.40N / 0835455.52W	Y	FB	TF	086.84	48.83	AT/BELOW FL210		
RAYZZ	275449.67N / 0831007.19W	Y	FB	TF	084.70	39.86	AT 10000		
En Route Transition									
CIGAR	272936.61N / 0844659.51W	Y		IF					CIGAR.RAYZZ3
DAAWG	275115.40N / 0835455.52W	Y	FB	TF	064.77	51.02	AT/BELOW FL210		
RAYZZ	275449.67N / 0831007.19W	Y	FB	TF	084.70	39.86	AT 10000		
En Route Transition									
DAAWG	275115.40N / 0835455.52W	Y		IF			AT/BELOW FL210		DAAWG.RAYZZ3
RAYZZ	275449.67N / 0831007.19W	Y	FB	TF	084.70	39.86	AT 10000		
Common Route									
RAYZZ	275449.67N / 0831007.19W	Y		IF			AT 10000		RAYZZ.RAYZZ3
HIDOS	280342.59N / 0825007.14W	Y	FB	TF	063.34	19.80			
Common Route									
RAYZZ	275449.67N / 0831007.19W	Y		IF			AT 10000		RAYZZ.RAYZZ3
SHKRA	275529.67N / 0830153.59W	Y	FO	TF	084.76	07.32			
KCLW, KLAL, KMCF, KPIE, KSPG, KTPF, KVDF				FM	084.76				
Common Route									
RAYZZ	275449.67N / 0831007.19W	Y		IF			AT 10000		RAYZZ.RAYZZ3
ALROE	274711.09N / 0830029.00W	Y	FB	TF	131.71	11.45			
MAHAR	274147.52N / 0825353.64W	Y	FO	TF	132.58	07.94			
KSRQ				FM	132.58				



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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
Common Route									
RAYZZ	275449.67N / 0831007.19W	Y		IF			AT 10000		RAYZZ.RAYZZ3
ALROE	274711.09N / 0830029.00W	Y	FB	TF	131.71	11.45			
COVUM	274105.04N / 0825537.25W	Y	FO	TF	144.64	07.46			
KVNC				FM	144.64				
Runway Transition									
HIDOS	280342.59N / 0825007.14W	Y		IF					
CBASS	280025.50N / 0823653.27W	Y	FB	TF	105.58	12.16			
TOOTH	275400.48N / 0823708.70W	Y	FB	TF	182.04	06.40	AT 5000	AT 210K	
BUGGO	275024.04N / 0823717.20W	Y	FB	TF	182.00	03.60			
FELOM	274523.21N / 0823729.01W	Y	FO	TF	182.00	05.00	AT 5000	AT 210K	
KTPA:RWY 1L,RWY 1R				FM	182.00				
Runway Transition									
HIDOS	280342.59N / 0825007.14W	Y		IF					
BAYAD	280354.11N / 0824328.21W	Y	FO	TF	088.11	05.89			
KTPA:RWY 10,RWY 28				VM	090.00				
Runway Transition									
HIDOS	280342.59N / 0825007.14W	Y		IF					
ENTAH	280403.27N / 0823641.64W	Y	FB	TF	088.29	11.88			
VENNU	280904.08N / 0823641.64W	Y	FO	TF	000.00	05.00	AT 5000	AT 210K	
KTPA:RWY 19L,RWY 19R				FM	001.00				

