

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
GRAPHIC DEPARTURE PROCEDURES (DP)**

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.

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
ZZ000	FOUR	ZZ0004.ZZ000	THREE	07/14/2022	<b>31OCT2024</b>

<u>TYPE:</u>	<u>OBSTACLE</u>	<u>COPTER</u>	<u>SID</u>	<u>SPECIAL</u>	<u>RNAV</u>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DP ROUTE DESCRIPTION:**

TAKEOFF RWY 27: CLIMB DIRECT JETTI, THEN LEFT TURN DIRECT TO CROSS ZZ000 BETWEEN 6000 AND FL230 AND AT OR BELOW 230 KIAS, THEN ON TRANSITION. JETS MAINTAIN FL230, TURBO-PROPS MAINTAIN 15000, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

**TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):**

<u>TRANSITION NAME</u>	<u>TRANSITION COMPUTER CODE</u>	<u>FROM FIX/NAVAID</u>	<u>TO FIX/NAVAID</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>MEA</u>	<u>MOCA</u>	<u>CROSSING ALTITUDE/FIXES</u>
CENZA	ZZ0004.CENZA	ZZ000	CENZA	TRACK 099.17	7.76	4000	2400	
GILA BEND	ZZ0004.GBN	ZZ000	ANRMN	TRACK 085.09	7.20	7000	2300	
		ANRMN	JORRJ	TRACK 057.84	7.92	7000	4200	JORRJ AT/ABOVE 11000
		JORRJ	GRIDR	TRACK 077.34	10.41	7000	6000	
		GRIDR	GUUSE	TRACK 080.01	16.62	15000	6400	
		GUUSE	BLUZE	TRACK 072.82	20.06	15000	7000	
		BLUZE	IPL VORTAC	TRACK 072.71	26.61	15000	5700	
		IPL VORTAC	BZA VORTAC	TRACK 077.31	45.84	15000	3800	
		BZA VORTAC	HOGGZ	TRACK 078.00	27.01	15000	4200	
		HOGGZ	MOHAK	TRACK 078.29	4.91	15000	3200	
		MOHAK	JUDTH	TRACK 069.29	14.55	15000	4100	
		JUDTH	GBN VORTAC	TRACK 069.45	51.92	15000	3700	
HOGGZ	ZZ0004.HOGGZ	ZZ000	ANRMN	TRACK 085.09	7.20	7000	2300	
		ANRMN	JORRJ	TRACK 057.84	7.92	7000	4200	JORRJ AT/ABOVE 11000
		JORRJ	GRIDR	TRACK 077.34	10.41	7000	6000	
		GRIDR	GUUSE	TRACK 080.01	16.62	15000	6400	



<u>DP NAME</u>		<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
ZZOOO		FOUR	ZZOOO4.ZZOOO	THREE	07/14/2022	31OCT2024
		GUUSE	BLUZE	TRACK 072.82	20.06	15000 7000
		BLUZE	IPL VORTAC	TRACK 072.71	26.61	15000 5700
		IPL VORTAC	BZA VORTAC	TRACK 077.31	45.84	15000 3800
		BZA VORTAC	HOGGZ	TRACK 078.00	27.01	15000 4200
MTBAL	ZZOOO4.MTBAL	ZZOOO	ANRMN	TRACK 085.09	7.20	7000 2300
		ANRMN	JORRJ	TRACK 057.84	7.92	7000 4200 JORRJ AT/ABOVE 11000
		JORRJ	GRIDR	TRACK 077.34	10.41	7000 6000
		GRIDR	PIEZZ	TRACK 011.43	21.92	15000 8700
		PIEZZ	NSHEE	TRACK 012.72	25.52	15000 8400
		NSHEE	MTBAL	TRACK 043.37	21.01	15000 8900
TGOLD	ZZOOO4.TGOLD	ZZOOO	ANRMN	TRACK 085.09	7.20	7000 2300
		ANRMN	JORRJ	TRACK 057.84	7.92	7000 4200 JORRJ AT/ABOVE 11000
		JORRJ	GRIDR	TRACK 077.34	10.41	7000 6000
		GRIDR	GUUSE	TRACK 080.01	16.62	15000 6400
		GUUSE	BLUZE	TRACK 072.82	20.06	15000 7000
		BLUZE	IPL VORTAC	TRACK 072.71	26.61	15000 5700
		IPL VORTAC	BZA VORTAC	TRACK 077.31	45.84	15000 3800
		BZA VORTAC	HOGGZ	TRACK 078.00	27.01	15000 4200
		HOGGZ	MOHAK	TRACK 078.29	4.91	15000 3200
		MOHAK	JUDTH	TRACK 069.29	14.55	15000 4100
		JUDTH	TGOLD	TRACK 058.11	52.20	15000 4600

**PBN REQUIREMENT NOTES:**

RNAV 1 - DME/DME/IRU OR GPS.

**EQUIPMENT REQUIREMENT NOTES:**

RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT.

FOR NON-GPS EQUIPPED AIRCRAFT USING TGOLD OR GBN TRANSITIONS, BLH DME MUST BE OPERATIONAL.



<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
ZZOOO	FOUR	ZZOOO4.ZZOOO	THREE	07/14/2022	<b>31OCT2024</b>

**PROCEDURAL DATA NOTES:**

CHART NOTE: JETS/TURBO-PROPS ONLY.  
 CHART NOTE: HOGGZ TRANSITION FOR PHX TERMINAL AREA ARRIVALS ONLY.

**TAKEOFF MINIMUMS:**

RW7 27: 400-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 370 FT/NM TO 300.

**TAKEOFF OBSTACLES NOTES:**

SEE FORM 8260-15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP).

**CONTROLLING OBSTACLES:**

RWY 27: 175 FT MSL TREE 324432.17N/1171251.97W (CLIMB GRADIENT), 237 FT MSL TREE 324413.65N/1171317.16W (CLIMB-TO ALTITUDE), 333 FT MSL TREE 324413.30N/1171437.43W (CEILING), 327 FT MSL TREE 324412.49N/1171443.24W (VISIBILITY).

**MSA:**

MSA FROM KSAN 5400.

**LOST COMMUNICATIONS PROCEDURES:**

**ADDITIONAL FLIGHT DATA:**

DME/DME ASSESSMENT: SAT (RNP 2.0).  
 CHART: TOP ALTITUDE: JETS FL230/TURBO-PROPS 15000.  
 CHART SPEED ICON MAXIMUM 230 KIAS AT ZZOOO.  
 AIRPORT MV: SAN E11/2020.

**AIRPORTS SERVED:**

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
KSAN	SAN DIEGO	CA

**COMMUNICATIONS:**

CHART: ATIS, CLNC DEL, GND CON, TOWER.

**FIXES AND/OR NAVAIDS:**

**REMARKS:**

VEGETATION HEIGHT 100 FEET PER FPT.  
 MSA CONTROLLING OBSTACLE: 4400 MSL AAO 325054.00N/1163906.00W.  
 MEAS ABOVE MOCAS NEEDED FOR DME/DME/IRU NAVIGATION.

**FLIGHT INSPECTED BY**

KEVIN Y CHENG

**SIGNATURE**

*Digitally signed by*

**ALLAN WILL**

Aug 16, 2024

*Digitally signed by*

**ALLAN WILL**

Aug 16, 2024

**OFFICE**

FPO

**DATE**

08/15/2024

**DEVELOPED BY**

ALLAN WILL (DANIEL C JOHNSEN)

**OFFICE**

AJV-A423

**DATE**

04/22/2024

**APPROVED BY**

ALLAN WILL

**SIGNATURE**

*Digitally signed by*

**ALLAN WILL**

Aug 16, 2024

**OFFICE**

AJV-A423

**DATE**

**TITLE**

MANAGER



<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
ZZ000	FOUR	ZZ0004.ZZ000	THREE	07/14/2022	<b>31OCT2024</b>

**REQUIRED EFFECTIVE DATE**

ROUTINE

**COORDINATED WITH:**

**A4A**  **ALPA**  **AOPA**  **APA**  **HAI**  **NBAA**  **OTHER:**ZLA, SOCAL DEP CON, SOCAL TRACON, WSCT, FPT

**CHANGES - REASONS:**

1. CHANGED MOCA IN CENZA TRANSITION SEGMENT ZZ000-CENZA FROM "2300" TO "2400" -- NEW CONTROLLING OBSTACLE.
2. DELETED CROSSING ALTITUDES/FIXES "ZZ000 BETWEEN 6000 AND FL230" IN CENZA TRANSITION SEGMENT ZZ000-CENZA -- CROSSING RESTRICTION APPLIES IN THE RUNWAY TRANSITION AT ZZ000.
3. DELETED IMPERIAL TRANSITION ROUTE AND ADDED GILA BEND, HOGGZ, AND TGOLD TRANSITION ROUTES -- ATC REQUEST.
4. ADDED FIX ANRMN BETWEEN ZZ000 AND JORRJ IN MTBAL TRANSITION ROUTE -- ATC REQUEST.
5. CHANGED CROSSING ALTITUDE AT JORRJ FROM "AT/ABOVE 14000" TO "JORJJ AT/ABOVE 11000" IN MTBAL TRANSITION ROUTE -- ATC REQUEST.
6. CHANGED COURSE/DISTANCE IN SEGMENT JORRJ-GRIDR FROM "065.75/7.44" TO "077.34/10.41" AND MOCA FROM "5800" TO "6000" IN MTBAL TRANSITION ROUTE -- FIXES JORJJ AND GRIDR RELOCATED.
7. CHANGED COURSE/DISTANCE IN SEGMENT GRIDER-PIEZZ FROM "011.42/24.57" TO "011.43/21.92" IN MTBAL TRANSITION ROUTE -- FIX GRIDR RELOCATED.
8. CHANGED MOCA IN SEGMENTS PIEZZ-NSHEE FROM "8300" TO "8400" AND NSHEE-MTBAL FROM "8700" TO "8900" IN MTBAL TRANSITION ROUTE -- NEW CONTROLLING OBSTACLE.
9. MOVED PROCEDURAL DATA NOTE FOR NON-GPS EQUIPPED AIRCRAFT TO EQUIPMENT REQUIREMENTS NOTES AND CHANGED FROM "...MTBAL OR IPL TRANSITIONS, PGY DME..." TO "...TGOLD OR GBN TRANSITIONS, BLH DME..." -- NO CRITICAL DMES FOR MTBAL TRANSITION, IMPERIAL TRANSITION DELETED; TGOLD AND GBN TRANSITIONS ADDED WITH CRITICAL DME; UPDATED IAW 8260.46J, 2-1-1.F(4).
10. DELETED "RWY 9: NA - ATC" IN TAKEOFF MINIMUMS -- OTHER DEPARTURES AUTHORIZED FOR RWY 9; UPDATED IAW 8260-46J, APPENDIX E, SECTION 1, 2.H.
11. CHANGED TAKEOFF MINIMUMS FROM "RWY 27: STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 520" TO "RWY 27: 400-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 370 FT/NM TO 310" -- LNAV ENGAGEMENT CLIMB GRADIENT REMOVED AND OBSTACLE CLIMB GRADIENT APPLIED.
12. CHANGED CONTROLLING OBSTACLES FROM "RWY 27: 169 FT MSL TREE 324432.18N/1171251.95W (CLIMB GRADIENT), 328 FT MSL TREE 324413.30N/1171437.39W (CLIMB-TO ALTITUDE)" TO "RWY 27: 175 FT MSL TREE 324432.17N/1171251.97W (CLIMB GRADIENT), 237 FT MSL TREE 324413.65N/1171317.16W (CLIMB TO ALTITUDE), 333 FT MSL TREE 324413.30N/1171437.43W (CEILING), 327 FT MSL TREE 324412.49N/1171443.24W (VISIBILITY)" -- SEE AND AVOID ADDED TO TAKEOFF MINIMUMS PER ATC; NEW CONTROLLING OBSTACLES.
13. ADDED MSA -- UPDATED IAW 8260.46J, APPENDIX E, SECTION 2, 2.K.
14. ADDED REMARK "MEAS ABOVE MOCAS NEEDED FOR DME/DME/IRU NAVIGATION" -- INFORMATION ADDED PER ATC.
15. CHANGED MEA IN MTBAL TRANSITION SEGMENT JORRJ-GRIDR FROM "14000" TO "7000" -- ATC REQUEST SUPPORTED BY DME/DME ASSESSMENT.
16. CHANGED DP ROUTE DESCRIPTION FROM "...230 KIAS, THENCE... ..ON (TRANSITION)." TO "230 KIAS, THEN ON TRANSITION." -- SINGLE RUNWAY PROCEDURE.
17. ADDED REMARK "VEGETATION HEIGHT 100 FEET PER FPT" -- INFORMATION ADDED PER FPT.
18. ADDED REMARK "MSA CONTROLLING OBSTACLE: 4400 MSL AAO 325054.00N/1163906.00W" -- INFORMATION ADDED FOR FUTURE REFERENCE
19. ADDED "CHART NOTE: JETS/TURBO-PROPS ONLY" IN PROCEDURAL DATA NOTES -- PROCEDURE RESTRICTED TO JETS/TURBO-PROPS PER FPT; UPDATED IAW 8260.46J, .
20. ADDED "CHART NOTE: HOGGZ TRANSITION FOR PHX TERMINAL AREA ARRIVALS ONLY" IN PROCEDURAL DATA NOTES -- ATC REQUEST.
20. ADDED REMARK "AIRPORT MV: SAN E11/2020" -- UPDATED IAW MEMO MAGNETIC VARIATION DOCUMENTATION FOR STANDARD INSTRUMENT DEPARTURES AND GRAPHIC OBSTACLE DEPARTURE PROCEDURES.



**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
DEPARTURE (DATA RECORD)**

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>				
ZZOOO	FOUR	ZZOOO4.ZZOOO	THREE	07/14/2022	<b>31OCT2024</b>				
<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>
RW27 (AER)*	324352.94N/1171050.27W*	N	-	-	-	-			*DISP THLD (1810 FT)
JETTI	324549.50N/1171852.38W	Y	FO	DF	-	7.05			CG 370 FT/NM TO 300
ZZOOO	323753.24N/1171444.98W	Y	FB	DF	-	8.65	6000BFL230	AT/BELOW 230K	LEFT TURN
ZZOOO	323753.24N/1171444.98W	Y	-	IF	-	-			ZZOOO4.CENZA
CENZA	323512.14N/1170607.85W	Y	FB	TF	110.17	7.76			
ZZOOO	323753.24N/1171444.98W	Y	-	IF	-	-			ZZOOO4.GBN
ANRMN	323707.04N/1170616.39W	Y	FB	TF	096.09	7.20			
JORRJ	323958.61N/1165731.31W	Y	FB	TF	068.84	7.92	AT/ABOVE 11000		
GRIDR	324016.09N/1164511.67W	Y	FB	TF	088.34	10.41			
GUUSE	323956.86N/1162530.61W	Y	FB	TF	091.01	16.62			
BLUZE	324204.52N/1160152.25W	Y	FB	TF	083.82	20.06			
IPL VORTAC	324455.92N/1153030.90W	Y	FB	TF	083.71	26.61			
BZA VORTAC	324605.19N/1143610.61W	Y	FB	TF	088.31	45.84			
HOGGZ	324629.50N/1140409.12W	Y	FB	TF	089.00	27.01			
MOHAK	324633.04N/1135819.55W	Y	FB	TF	089.29	4.91			
JUDTH	324859.41N/1134118.22W	Y	FB	TF	080.29	14.55			
GBN VORTAC	325722.53N/1124027.38W	Y	FB	TF	080.45	51.92			
ZZOOO	323753.24N/1171444.98W	Y	-	IF	-	-			ZZOOO4.HOGGZ
ANRMN	323707.04N/1170616.39W	Y	FB	TF	096.09	7.20			



<u>DP NAME</u>		<u>NUMBER</u>		<u>DP COMPUTER CODE</u>		<u>SUPERSEDED NUMBER</u>		<u>DATED</u>		<u>ACTUAL EFFECTIVE DATE</u>	
ZZOOO		FOUR		ZZOOO4.ZZOOO		THREE		07/14/2022		31OCT2024	
<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>		
JORRJ	323958.61N/1165731.31W	Y	FB	TF	068.84	7.92	AT/ABOVE 11000				
GRIDR	324016.09N/1164511.67W	Y	FB	TF	088.34	10.41					
GUUSE	323956.86N/1162530.61W	Y	FB	TF	091.01	16.62					
BLUZE	324204.52N/1160152.25W	Y	FB	TF	083.82	20.06					
IPL VORTAC	324455.92N/1153030.90W	Y	FB	TF	083.71	26.61					
BZA VORTAC	324605.19N/1143610.61W	Y	FB	TF	088.31	45.84					
HOGGZ	324629.50N/1140409.12W	Y	FB	TF	089.00	27.01					
ZZOOO	323753.24N/1171444.98W	Y	-	IF	-	-					ZZOOO4.MTBAL
ANRMN	323707.04N/1170616.39W	Y	FB	TF	096.09	7.20					
JORRJ	323958.61N/1165731.31W	Y	FB	TF	068.84	7.92	AT/ABOVE 11000				
GRIDR	324016.09N/1164511.67W	Y	FB	TF	088.34	10.41					
PIEZZ	330033.89N/1163514.81W	Y	FB	TF	022.43	21.92					
NSHEE	332357.70N/1162259.20W	Y	FB	TF	023.72	25.52					
MTBAL	333611.93N/1160232.30W	Y	FB	TF	054.37	21.01					
ZZOOO	323753.24N/1171444.98W	Y	-	IF	-	-					ZZOOO4.TGOLD
ANRMN	323707.04N/1170616.39W	Y	FB	TF	096.09	7.20					
JORRJ	323958.61N/1165731.31W	Y	FB	TF	068.84	7.92	AT/ABOVE 11000				
GRIDR	324016.09N/1164511.67W	Y	FB	TF	088.34	10.41					
GUUSE	323956.86N/1162530.61W	Y	FB	TF	091.01	16.62					
BLUZE	324204.52N/1160152.25W	Y	FB	TF	083.82	20.06					
IPL VORTAC	324455.92N/1153030.90W	Y	FB	TF	083.71	26.61					
BZA VORTAC	324605.19N/1143610.61W	Y	FB	TF	088.31	45.84					

QUALITY  
8  
CHECKED

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
ZZ000	FOUR	ZZ0004.ZZ000	THREE	07/14/2022	<b>31OCT2024</b>

<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>
HOGGZ	324629.50N/1140409.12W	Y	FB	TF	089.00	27.01			
MOHAK	324633.04N/1135819.55W	Y	FB	TF	089.29	4.91			
JUDTH	324859.41N/1134118.22W	Y	FB	TF	080.29	14.55			
TGOLD	330725.00N/1124314.00W	Y	FB	TF	069.11	52.20			

