

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation 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. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY	SIX	COWBY6.COWBY	FIVE	15 NOV 2012	30 APR 2015

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 1L/R: CLIMB HEADING 009.92 TO INTERCEPT COURSE 068.00 TO NAPSE, THEN ON TRACK 061.95 TO CROSS RIOOS AT OR ABOVE 13000, THEN ON TRACK 128.39 TO COMPS, THEN ON TRACK 085.07 TO COWBY, THENCE...

TAKEOFF RWY 7L: CLIMB HEADING 074.96 TO 2681, THEN DIRECT WASTE, THEN ON TRACK 075.31 TO CROSS BAKRR AT OR BELOW 7000 AND AT OR ABOVE 4600, THEN ON TRACK 084.81 TO COMPS, THEN ON TRACK 085.07 TO COWBY, THENCE...

TAKEOFF RWY 7R: CLIMB HEADING 074.95 TO 2681, THEN DIRECT JESJI, THEN ON TRACK 073.75 TO CROSS BAKRR AT OR BELOW 7000 AND AT OR ABOVE 4600, THEN ON TRACK 084.81 TO COMPS, THEN ON TRACK 085.07 TO COWBY, THENCE...

TAKEOFF RWY 19L: CLIMB HEADING 189.92 TO 2681, THEN DIRECT FIXIX, THEN ON TRACK 226.76 TO CROSS ROPPR AT OR BELOW 7000 AND AT OR ABOVE 5900, THEN ON TRACK 147.84 TO CROSS CEASR AT OR ABOVE 8000, THEN ON TRACK 091.35 TO CROSS HITME AT OR ABOVE 11000, THEN ON TRACK 068.54 TO COWBY, THENCE...

TAKEOFF RWY 19R: CLIMB HEADING 189.91 TO 2681, THEN DIRECT JAKER, THEN ON TRACK 226.01 TO CROSS ROPPR AT OR BELOW 7000 AND AT OR ABOVE 5900, THEN ON TRACK 147.84 TO CROSS CEASR AT OR ABOVE 8000, THEN ON TRACK 091.35 TO CROSS HITME AT OR ABOVE 11000, THEN ON TRACK 068.54 TO COWBY, THENCE...

TAKEOFF RWY 25L: CLIMB HEADING 254.96 TO 2681, THEN DIRECT PIRMD, THEN ON TRACK 186.12 TO CROSS ROPPR AT OR BELOW 7000 AND AT OR ABOVE 5900, THEN ON TRACK 147.84 TO CROSS CEASR AT OR ABOVE 8000, THEN ON TRACK 091.35 TO CROSS HITME AT OR ABOVE 11000, THEN ON TRACK 068.54 TO COWBY, THENCE...

TAKEOFF RWY 25R: CLIMB HEADING 254.93 TO 2681, THEN DIRECT RBELL, THEN ON TRACK 185.85 TO CROSS ROPPR AT OR BELOW 7000 AND AT OR ABOVE 5900, THEN ON TRACK 147.84 TO CROSS CEASR AT OR ABOVE 8000, THEN ON TRACK 091.35 TO CROSS HITME AT OR ABOVE 11000, THEN ON TRACK 068.54 TO COWBY, THENCE...

... VIA (TRANSITION). MAINTAIN FL190, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes
DRAKE	COWBY6.DRK	COWBY	NAVHO	097.97 TRACK	77.93	15000	10000	
		NAVHO	DRK VORTAC	167.72 TRACK	42.24	15000		
GALLUP	COWBY6.GUP	COWBY	MOSBI	085.83 TRACK	100.01	15000	10000	AT/ABOVE 15000
		MOSBI	GUP VORTAC	076.83 TRACK	148.17	15000	10000	
WILSLOW	COWBY6.INW	COWBY	CUTRO	088.99 TRACK	76.61	15000	10000	AT/ABOVE 15000
		CUTRO	INW VORTAC	097.19 TRACK	84.49	15000		

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PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

TAKEOFF MINIMUMS:

RWY 1L/R: STANDARD WITH MINIMUM CLIMB OF 483 PER NM TO 13000.

RWY 7L/R: STANDARD WITH MINIMUM CLIMB OF 310 FT PER NM TO 7000.

RWY 19L/R: STANDARD WITH MINIMUM CLIMB OF 400 FT PER NM TO 10000.

RWY 25L/R: STANDARD WITH MINIMUM CLIMB OF 350 FT PER NM TO 11000.

NOTE: DME/DME/IRU OR GPS REQUIRED.

NOTE: RNAV 1.

NOTE: RADAR REQUIRED.

NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 1L/R, 19L/R, 25L/R: LAS, BLD, MMM, PGS, DRK, GCN, TBC, ZUN, INW AND GUP DME'S MUST BE OPERATIONAL FOR THE GALLUP TRANSITION.

NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 7L/R: LSV, LAS, BLD, MMM, PGS, DRK, GCN, TBC, ZUN, INW AND GUP DME'S MUST BE OPERATIONAL FOR THE GALLUP TRANSITION.

NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 1L/R, 19L/R, 25L/R: BLD, LAS, MMM, PGS, DRK, FLG AND INW DME'S MUST BE OPERATIONAL FOR THE WINSLOW TRANSITION.

NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWY 7L: LSV, LAS, BLD, MMM, DRK, FLG AND INW DME'S MUST BE OPERATIONAL FOR THE WINSLOW TRANSITION.

NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWY 7R: LSV, LAS, MMM, PGS, DRK, FLG AND INW DME'S MUST BE OPERATIONAL FOR THE WINSLOW TRANSITION.

NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 7L/R: LSV, LAS, MMM, GCN, PGS AND DRK DME'S MUST BE OPERATIONAL FOR THE DRAKE TRANSITION.

NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 1L/R, 19L/R, 25L/R: BLD, LAS, MMM, GCN, PGS AND DRK DME'S MUST BE OPERATIONAL FOR THE DRAKE TRANSITION.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 1L, BUILDING 1508 FT FROM DER, 463 FT LEFT OF CENTERLINE, 71 FT AGL/2146 FT MSL. POLE 453 FT FROM DER, 283 FT LEFT OF CENTERLINE, 38 FT AGL/2118 FT MSL. SIGN 1042 FT FROM DER, 694 FT LEFT OF CENTERLINE, 35 FT AGL/2124 FT MSL.

NOTE: RWY 1R, SIGN 1331 FT FROM DER, 448 FT RIGHT OF CENTERLINE, 60 FT AGL/2120 FT MSL. VENTS 604 FT FROM DER, 539 FT RIGHT OF CENTERLINE, UP TO 17 FT AGL/2095 FT MSL.

NOTE: RWY 7L, TREES 761 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 42 FT AGL/ 2074 FT MSL. POLE 747 FT FROM DER, 442 FT RIGHT OF CENTERLINE, 25 FT AGL/2057 FT MSL.

NOTE: RWY 7R, TOWER 1457 FT FROM DER, 847 FT RIGHT OF CENTERLINE, 65 FT AGL/2096 FT MSL.

NOTE: RWY 19L, MULTIPLE BUILDINGS, TREES AND POLES BEGINNING 1394 FT FROM DER, 251 FT RIGHT OF CENTERLINE, UP TO 96 FT AGL/2284 FT MSL. SIGN 2181 FT FROM DER, 1062 FT RIGHT OF CENTERLINE, 36 FT AGL/2236 FT MSL.

NOTE: RWY 19R, TREES BEGINNING 1563 FROM DER, 329 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/2236 FT MSL. MULTIPLE BUILDINGS SIGNS AND POLES BEGINNING 197 FT FROM DER, 59 FT RIGHT OF CENTERLINE, UP TO 75 FT AGL/2291 FT MSL.

NOTE: RWY 25L, MULTIPLE POLES, SIGN AND BUILDINGS BEGINNING 1003 FT FROM DER, 145 FT LEFT OF CENTERLINE, UP TO 97 FT AGL/2291 FT MSL. TREE 2837 FT FROM DER, 1008 FT LEFT OF CENTERLINE, 72 FT AGL/2230 FT MSL. RAILROAD 2564 FT FROM DER, 773 FT LEFT OF CENTERLINE, 66 FT AGL/2223 FT MSL.

NOTE: RWY 25R, MULTIPLE POLES AND TREES BEGINNING 533 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 271 FT AGL/2457 FT MSL. BUILDING 1822 FT FROM DER, 652 FT LEFT OF CENTERLINE, 59 FT AGL/2238 FT MSL. ROADS BEGINNING 669 FT FROM DER, 17 FT RIGHT OF CENTERLINE, UP TO 29 FT AGL/2208 FT MSL.

CONTROLLING OBSTACLES:

RWY 19L/R, 25L/R: 4753 FT MSL AAO 355440.10N/1151859.90W. **RWY 1L/R:** 4280 FT MSL AAO 361038.70N/1145940.50W

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COWBY	SIX	COWBY6.COWBY	FIVE	15 NOV 2012	30 APR 2015

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

CHART: TOP ALTITUDE: FL190
DME/DME ASSESMENT: SAT (RNP 2.0).
REFERENCE MAG VAR: KLAS 15E, EPOCH YR 1980

AIRPORTS SERVED:

MCCARRAN INTL

LAS VEGAS, NV

COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, LAS TWR, LAS DEP CON

FIXES AND/OR NAVAIDS:

REMARKS:

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COORDINATED WITH:

ATA, ALPA, APA, AOPA, NBAA, ZLA, ZAB, LAS TWR, LAS APP CON, AMGR

CHANGES:

ADDED CHART: TOP ALTITUDE: FL190

REASONS:

ATC REQUEST.

DEPARTURE (DATA RECORD)

DP Name		Number		DP Computer Code		Superseded Number		Dated	Effective Date
COWBY		SIX		COWBY6.COWBY		FIVE		15 NOV 2012	30 APR 2015
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW01L (AER)*	360436.44N/1151010.30W*	N	-	-	-	-			*DISPL THLD (584), CG 483 FT /NM TO 13000 DO NOT CHART DISTANCE. RECOMMENDED NAVAID: LAS VORTAC RIGHT TURN, VI/CF PERMITTED
	360737.48N/1150826.67W	-	-	VI	024.92	1.94			
NAPSE	360934.00N/1144914.00W	Y	FB	CF	083.00	15.74			
RIOOS	361120.81N/1143943.64W	Y	FB	TF	076.95	7.90	AT/ABOVE 13000		
COMPS	360040.66N/1142958.59W	Y	FB	TF	143.39	13.26			
COWBY	355524.84N/1135409.94W	Y	FB	TF	100.07	29.54			
RW01R (AER)*	360431.68N/1151000.43W*	N	-	-	-	-			*DISPL THLD (491), CG 483 FT /NM TO 13000 DO NOT CHART DISTANCE. RECOMMENDED NAVAID: LAS VORTAC RIGHT TURN, VI/CF PERMITTED
	360739.01N/1150813.20W	-	-	VI	024.92	1.91			
NAPSE	360934.00N/1144914.00W	Y	FB	CF	083.00	15.53			
RIOOS	361120.81N/1143943.64W	Y	FB	TF	076.95	7.90	AT/ABOVE 13000		
COMPS	360040.66N/1142958.59W	Y	FB	TF	143.39	13.26			
COWBY	355524.84N/1135409.94W	Y	FB	TF	100.07	29.54			
RW07L (AER)*	360434.95N/1150946.63W*	N	-	-	-	-			*DISL THLD (2139) CG 310 FT/NM TO 7000
2681 MSL		-	-	VA	089.96	-			
WASTE	360435.14N/1150425.72W	Y	FB	DF	-	-			
BAKRR	360433.00N/1145711.00W	Y	FB	TF	090.31	05.87	AT/BELOW 7000 AT/ABOVE 4600		
COMPS	360040.66N/1142958.59W	Y	FB	TF	099.81	22.40			
COWBY	355524.84N/1135409.94W	Y	FB	TF	100.07	29.54			
RW07R (AER)	360425.06N/1150941.16W	N	-	-	-	-			CG 310 FT/NM TO 7000
2681 MSL		-	-	VA	089.95	-			
JESJI	360425.22N/1150442.73W	Y	FB	DF	-	-			
BAKRR	360433.00N/1145711.00W	Y	FB	TF	088.75	6.10	AT/BELOW 7000 AT/ABOVE 4600		
COMPS	360040.66N/1142958.59W	Y	FB	TF	099.81	22.40			
COWBY	355524.84N/1135409.94W	Y	FB	TF	100.07	29.54			

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DP Name		Number		DP Computer Code		Superseded Number		Dated	Effective Date
COWBY		SIX		COWBY6.COWBY		FIVE		15 NOV 2012	30 APR 2015
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW19L (AER)	360547.06N/1150917.28W	N	-	-	-	-			
2681 MSL		-	-	VA	204.92	-			CG 400 FT/NM TO 10000
FIXIX	360054.10N/1151204.79W	Y	FB	DF	-	-			
ROPPR	355816.27N/1151805.99W	Y	FB	TF	241.76	5.55	AT/BELOW 7000 AT/ABOVE 5900		
CEASR	355159.04N/1151542.89W	Y	FB	TF	162.84	6.57	AT/ABOVE 8000		
HITME	354917.00N/1150427.00W	Y	FB	TF	106.35	9.55	AT/ABOVE11000		
COWBY	355524.84N/1135409.94W	Y	FB	TF	083.54	57.45			
RW19R (AER)	360551.76N/1150927.28W	N	-	-	-	-			
2681 MSL		-	-	VA	204.91	-			CG 400 FT/NM TO 10000
JAKER	360053.20N/1151217.95W	Y	FB	DF	-	-			
ROPPR	355816.27N/1151805.99W	Y	FB	TF	241.01	5.38	AT/BELOW 7000 AT/ABOVE 5900		
CEASR	355159.04N/1151542.89W	Y	FB	TF	162.84	6.57	AT/ABOVE 8000		
HITME	354917.00N/1150427.00W	Y	FB	TF	106.35	9.55	AT/ABOVE11000		
COWBY	355524.84N/1135409.94W	Y	FB	TF	083.54	57.45			
RW25L (AER)	360425.16N/1150732.96W	N	-	-	-	-			
2681 MSL		-	-	VA	269.96	-			CG 350 FT/NM TO 11000
PIRMD	360424.61N/1151511.00W	Y	FB	DF	-	-			
ROPPR	355816.27N/1151805.99W	Y	FB	TF	201.12	6.57	AT/BELOW 7000 AT/ABOVE 5900		
CEASR	355159.04N/1151542.89W	Y	FB	TF	162.84	6.57	AT/ABOVE 8000		
HITME	354917.00N/1150427.00W	Y	FB	TF	106.35	9.55	AT/ABOVE 11000		
COWBY	355524.84N/1135409.94W	Y	FB	TF	083.54	57.45			
RW25R (AER)*	360435.05N/1150732.97W*	N	-	-	-	-			*DISPL THLD (1397)
2681 MSL		-	-	VA	269.93	-			CG 350 FT/NM TO 11000
RBELL	360434.51N/1151508.75W	Y	FB	DF	-	-			
ROPPR	355816.27N/1151805.99W	Y	FB	TF	200.85	6.74	AT/BELOW 7000 AT/ABOVE 5900		
CEASR	355159.04N/1151542.89W	Y	FB	TF	162.84	6.57	AT/ABOVE 8000		
HITME	354917.00N/1150427.00W	Y	FB	TF	106.35	9.55	AT/ABOVE 11000		
COWBY	355524.84N/1135409.94W	Y	FB	TF	083.54	57.45			

QUALITY
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DEPARTURE (DATA RECORD)

DP Name		Number	DP Computer Code				Superseded Number		Dated	Effective Date
COWBY		SIX	COWBY6.COWBY				FIVE		15 NOV 2012	30 APR 2015
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS	
COWBY	355524.84N/1135409.94W	Y	-	IF	-	-			COWBY6.DRK	
NAVHO	352425.02N/1122623.53W	Y	FB	IF	112.97	77.93				
DRK VORTAC	344209.20N/1122849.26W	Y	FB	TF	182.72	42.24				
COWBY	355524.84N/1135409.94W	Y	-	IF	-	-			COWBY6.GUP	
MOSBI	353534.60N/1115342.70W	Y	FB	TF	100.83	100.01	AT/ABOVE 15000			
GUP VORTAC	352833.60N/1085221.40W	Y	FB	TF	091.83	148.17				
COWBY	355524.84N/1135409.94W	Y	-	IF	-	-			COWBY6.INW	
CUTRO	353616.98N/1122300.00W	Y	FB	TF	103.99	76.61	AT/ABOVE 15000			
INW VORTAC	350341.77N/1104742.09W	Y	FB	TF	112.19	84.49				