

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| DP Name | Number | DP Computer Code | Superseded Number | Dated | Effective Date |
|---------|--------|------------------|-------------------|-------------|----------------|
| SHEAD | NINE | SHEAD9.SHEAD | EIGHT | 06 FEB 2014 | 30 APR 2015 |

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RUNWAY 1L/1R: CLIMB HEADING 009.92 TO 2681, THEN LEFT TURN DIRECT BESSY, THEN ON TRACK 187.98 TO CROSS MDDOG AT 9000, THEN ON TRACK 256.48 TO CROSS TARRK AT 11000, THEN ON TRACK 256.24 TO CROSS SHEAD AT OR ABOVE 14000. THENCE...

TAKEOFF RUNWAY 7L: CLIMB HEADING 074.93 TO 2681, THEN DIRECT WASTE, THEN ON TRACK 075.31 TO CROSS BAKRR AT OR ABOVE 6000, AT OR BELOW 7000, THEN ON TRACK 144.16 TO CROSS MINEY AT OR ABOVE 8000, THEN ON TRACK 210.33 TO HITME, THEN ON TRACK 261.08 TO CROSS SHEAD AT OR ABOVE 14000. THENCE...

TAKEOFF RUNWAY 7R: CLIMB HEADING 074.93 TO 2681, THEN DIRECT JESJI, THEN ON TRACK 073.75 TO CROSS BAKRR AT OR ABOVE 6000, AT OR BELOW 7000, THEN ON TRACK 144.16 TO CROSS MINEY AT OR ABOVE 8000, THEN ON TRACK 210.33 TO HITME, THEN ON TRACK 261.08 TO CROSS SHEAD AT OR ABOVE 14000. THENCE...

TAKEOFF RUNWAY 19L: CLIMB HEADING 189.92 TO 2681, THEN DIRECT FIXIX, THEN ON TRACK 226.76 TO CROSS ROPPR AT OR ABOVE 6500, AT OR BELOW 7000, THEN ON TRACK 209.59 TO CROSS MDDOG AT 9000, THEN ON TRACK 256.48 TO CROSS TARRK AT 11000, THEN ON TRACK 256.24 TO CROSS SHEAD AT OR ABOVE 14000. THENCE...

TAKEOFF RUNWAY 19R: CLIMB HEADING 189.92 TO 2681, THEN DIRECT JAKER, THEN ON TRACK 226.01 TO CROSS ROPPR AT OR ABOVE 6500, AT OR BELOW 7000, THEN ON TRACK 209.59 TO CROSS MDDOG AT 9000, THEN ON TRACK 256.48 TO CROSS TARRK AT 11000, THEN ON TRACK 256.24 TO CROSS SHEAD AT OR ABOVE 14000. THENCE...

TAKEOFF RUNWAY 25L: CLIMB HEADING 254.95 TO 2681, THEN DIRECT PIRMD, THEN ON TRACK 186.12 TO CROSS ROPPR AT OR ABOVE 6500, AT OR BELOW 7000, THEN ON TRACK 209.59 TO CROSS MDDOG AT 9000, THEN ON TRACK 256.48 TO CROSS TARRK AT 11000, THEN ON TRACK 254.24 TO CROSS SHEAD AT OR ABOVE 14000. THENCE...

TAKEOFF RUNWAY 25R: CLIMB HEADING 254.95 TO 2681, THEN DIRECT RBELL, THEN ON TRACK 185.85 TO CROSS ROPPR AT OR ABOVE 6500, AT OR BELOW 7000, THEN ON TRACK 209.51 TO CROSS MDDOG AT 9000, THEN ON TRACK 256.48 TO CROSS TARRK AT 11000, THEN ON TRACK 256.24 TO CROSS SHEAD AT OR ABOVE 14000. THENCE...

...(TRANSITION). MAINTAIN FL190. EXPECT FILED ALTITUDE 10 MIN 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 |
|-----------------|---------------------------|--------------------|------------------|--------------|----------|--------|------|--------------------------|
| COALDALE | SHEAD9.OAL | SHEAD | DBIGE | TRACK 301.98 | 45.21 | FL 210 | | AT/ABOVE FL210 |
| | | DBIGE | BIKKR | TRACK 301.61 | 9.98 | FL 210 | | AT/ABOVE FL210 |
| | | BIKKR | KENNO | TRACK 313.58 | 51.45 | FL 250 | | |
| | | KENNO | OAL VORTAC | TRACK 317.71 | 47.61 | FL 250 | | |
| KENNO | SHEAD9.KENNO | SHEAD | DBIGE | TRACK 301.98 | 45.21 | FL 210 | | AT/ABOVE FL210 |
| | | DBIGE | BIKKR | TRACK 301.61 | 9.98 | FL 210 | | AT/ABOVE FL210 |
| | | BIKKR | KENNO | TRACK 313.58 | 51.45 | FL 250 | | |

QUALITY
15
CHECKED

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PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

RWY 1L/R: 1100-3 WITH MINIMUM CLIMB OF 500 FT PER NM TO 6000. RWY 7L/R: STANDARD WITH MINIMUM CLIMB OF 400 FT PER NM TO 8000. RWY 19L/R/: STANDARD WITH MINIMUM CLIMB OF 483 FT PER NM TO 9000. RWY 25L/R: STANDARD WITH MINIMUM CLIMB OF 470 PER NM TO 9000.

NOTE: RWY 1L/R DO NOT EXCEED 230 KIAS UNTIL BESSY.

NOTE: DME/DME/IRU OR GPS REQUIRED

NOTE: RNAV 1.

NOTE: RADAR REQUIRED

NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 01L/R, 19L/R, 25L/R, LSV, BLD, BTY, AND TPH DME's MUST BE OPERATIONAL. FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 7L/R, BLD, BTY, AND TPH DME's MUST BE OPERATIONAL.

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 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 1563 FT FROM DER, 329 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/2236 FT MSL. MULTIPLE BUILDINGS, SIGNS AND POLES 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 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 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 669 FT FROM DER, 17 FT RIGHT OF CENTERLINE, UP TO 29 FT AGL/2208 FT MSL.

CONTROLLING OBSTACLES:

RWY 1L/R: 3189 FT MSL MONUMENT 360851.00N-1150920.00W; RWY 7L/R, 19L/R/, 25L/R: 8671 FT TOWER 355754.90N1153001.80W

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

CHART: TOP ALTITUDE: FL190

DME/DME ASSESMENT: SAT (RNP 2.0)

REFERENCE MAG VAR: KLAS 15E, EPOCH YEAR 1980

AIRPORTS SERVED:

MC CARRAN INTL

LAS VEGAS, NV



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COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, DEP CONTROL, LAS TOWER

FIXES AND/OR NAVAIDS:

REMARKS:

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COORDINATED WITH:

ATA, ALPA, APA, AOPA, NBAA, ZLA, LAS ATCT, AMGR

CHANGES:

ADDED: CHART: TOP ALTITUDE: FL190

REASONS:

ATC REQUEST



DEPARTURE (DATA RECORD)

| DP Name | | Number | | DP Computer Code | | Superseded Number | | Dated | Effective Date |
|---------------|-------------------------|--------|-------|------------------|--------|-------------------|----------------|---------------|--------------------------|
| SHEAD | | NINE | | SHEAD9.SHEAD | | EIGHT | | 06 FEB 2014 | 30 APR 2015 |
| FIX/NAVAID | LAT/LONG | C | FO/FB | LEG TYPE | TC | DIST (NM) | ALTITUDE | SPEED | REMARKS |
| RW01 L (AER)* | 360436.44N/1151010.30W* | N | - | - | - | - | | | *DISPL THLD (584 FT) |
| 2681 MSL | | - | - | VA | 024.92 | - | | | CG 500 FT PER NM TO 6000 |
| BESSY | 360627.67N/1151722.56W | Y | FB | DF | - | - | | AT/BELOW 230K | LEFT TURN |
| MDDOG | 355308.03N/1152419.14W | Y | FB | TF | 202.98 | 14.45 | 9000 | | |
| TARRK | 355325.66N/1153858.32W | Y | FB | TF | 271.48 | 11.91 | 11000 | | |
| SHEAD | 355344.62N/1155815.99W | Y | FB | TF | 271.24 | 15.68 | AT/ABOVE 14000 | | |
| RW01R (AER)* | 360431.67N/1151000.44W* | N | - | - | - | - | | | *DISPL THLD (491 FT) |
| 2681 MSL | | - | - | VA | 024.92 | - | | | CG 500 FT PER NM TO 6000 |
| BESSY | 360627.67N/1151722.56W | Y | FB | DF | - | - | | AT/BELOW 230K | |
| MDDOG | 355308.03N/1152419.14W | Y | FB | TF | 202.98 | 14.45 | 9000 | | |
| TARRK | 355325.66N/1153858.32W | Y | FB | TF | 271.48 | 11.91 | 11000 | | |
| SHEAD | 355344.62N/1155815.99W | Y | FB | TF | 271.24 | 15.68 | AT/ABOVE 14000 | | |
| RW07L (AER)* | 360434.95N/1150946.63W* | N | - | - | - | - | | | *DISPL THLD (2139 FT) |
| 2681 MSL | | - | - | VA | 089.93 | - | | | CG 400 FT PER NM TO 8000 |
| WASTE | 360435.14N/1140425.72W | Y | FB | DF | - | - | | | |
| BAKRR | 360433.00N/1145711.00W | Y | FB | TF | 090.31 | 5.87 | 6000B7000 | | |
| MINEY | 355743.00N/1145359.00W | Y | FB | TF | 159.16 | 7.30 | AT/ABOVE 8000 | | |
| HITME | 354917.00N/1150427.00W | Y | FB | TF | 225.33 | 11.97 | | | |
| SHEAD | 355344.62N/1155815.99W | Y | FB | TF | 276.08 | 43.97 | AT/ABOVE 14000 | | |
| RW07R (AER) | 360425.06N/1150941.16W | N | - | - | - | - | | | |
| 2681 MSL | | - | - | VA | 089.93 | - | | | CG 400 FT PER NM TO 8000 |
| JESJI | 360425.22N/1150442.73W | Y | FB | DF | - | - | | | |
| BAKRR | 360433.00N/1145711.00W | Y | FB | TF | 088.75 | 6.10 | 6000B7000 | | |
| MINEY | 355743.00N/1145359.00W | Y | FB | TF | 159.16 | 7.30 | AT/ABOVE 8000 | | |
| HITME | 354917.00N/1150427.00W | Y | FB | TF | 225.33 | 11.97 | | | |
| SHEAD | 355344.62N/1155815.99W | Y | FB | TF | 276.08 | 43.97 | AT/ABOVE 14000 | | |

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| SHEAD | | NINE | SHEAD9.SHEAD | | | | EIGHT | 06 FEB 2014 | 30 APR 2015 |
| FIX/NAVAID | LAT/LONG | C | FO/FB | LEG TYPE | TC | DIST (NM) | ALTITUDE | SPEED | REMARKS |
| RW19L (AER)* | 360547.01N/1150917.31W* | N | - | - | - | - | | | *DISPL THLD (878 FT) |
| 2681 MSL | | - | - | VA | 204.92 | - | | | CG 483 FT PER NM TO 9000 |
| FIXIX | 360054.10N/1151204.79W | Y | FB | DF | - | - | | | |
| ROPPR | 355816.27N/1151805.99W | Y | FB | TF | 241.76 | 5.55 | 6500B7000 | | |
| MDDOG | 355308.03N/1152419.14W | Y | FB | TF | 224.59 | 7.20 | 9000 | | |
| TARRK | 355325.66N/1153858.32W | Y | FB | TF | 271.48 | 11.91 | 11000 | | |
| SHEAD | 355344.62N/1155815.99W | Y | FB | TF | 271.24 | 15.68 | AT/ABOVE 14000 | | |
| RW19R (AER) | 360551.76N/1150927.19W | N | - | - | - | - | | | |
| 2681 MSL | | - | - | VA | 204.92 | - | | | CG 483 FT PER NM TO 9000 |
| JAKER | 360053.20N/1151217.95W | Y | FB | DF | - | - | | | |
| ROPPR | 355816.27N/1151805.99W | Y | FB | TF | 241.01 | 5.38 | 6500B7000 | | |
| MDDOG | 355308.03N/1152419.14W | Y | FB | TF | 224.59 | 7.20 | 9000 | | |
| TARRK | 355325.66N/1153858.32W | Y | FB | TF | 271.48 | 11.91 | 11000 | | |
| SHEAD | 355344.62N/1155815.99W | Y | FB | TF | 271.24 | 15.68 | AT/ABOVE 14000 | | |
| RW25L (AER) | 360425.17N/1150732.97W | N | - | - | - | - | | | |
| 2681 MSL | | - | - | VA | 269.95 | - | | | CG 400 FT PER NM TO 9000 |
| PIRMD | 360424.61N/1151511.00W | Y | FB | DF | - | - | | | |
| ROPPR | 355816.27N/1151805.99W | Y | FB | TF | 201.12 | 6.57 | 6500B7000 | | |
| MDDOG | 355308.03N/1152419.14W | Y | FB | TF | 224.59 | 7.20 | 9000 | | |
| TARRK | 355325.66N/1153858.32W | Y | FB | TF | 271.48 | 11.91 | 11000 | | |
| SHEAD | 355344.62N/1155815.99W | Y | FB | TF | 271.24 | 15.68 | AT/ABOVE 14000 | | |
| RW25R (AER)* | 360435.06N/1150732.94W* | N | - | - | - | - | | | *DISPL THLD (1397 FT) |
| 2681 MSL | | - | - | VA | 269.95 | - | | | CG 400 FT PER NM TO 9000 |
| RBELL | 360434.51N/1151508.75W | Y | FB | DF | - | - | | | |
| ROPPR | 355816.27N/1151805.99W | Y | FB | TF | 200.85 | 6.74 | 6500B7000 | | |
| MDDOG | 355308.03N/1152419.14W | Y | FB | TF | 224.59 | 7.20 | 9000 | | |
| TARRK | 355325.66N/1153858.32W | Y | FB | TF | 271.48 | 11.91 | 11000 | | |
| SHEAD | 355344.62N/1155815.99W | Y | FB | TF | 271.24 | 15.68 | AT/ABOVE 14000 | | |

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| SHEAD | | NINE | | SHEAD9.SHEAD | | | EIGHT | | 06 FEB 2014 | 30 APR 2015 |
| FIX/NAVAID | LAT/LONG | C | FO/FB | LEG TYPE | TC | DIST (NM) | ALTITUDE | SPEED | REMARKS | |
| SHEAD | 355344.62N/1155815.99W | Y | - | IF | - | - | AT/ABOVE 14000 | | SHEAD9.OAL | |
| DBIGE | 362644.76N/1163629.61W | Y | FB | TF | 316.98 | 45.21 | AT/ABOVE 21000 | | | |
| BIKKR | 363400.00N/1164500.00W | Y | FB | TF | 316.61 | 9.98 | AT/ABOVE 21000 | | | |
| KENNO | 371753.37N/1171836.81W | Y | FB | TF | 328.58 | 51.45 | | | | |
| OAL VORTAC | 380011.74N/1174613.61W | Y | FB | TF | 332.71 | 47.61 | | | | |
| SHEAD | 355344.62N/1155815.99W | Y | - | IF | - | - | AT/ABOVE 14000 | | SHEAD9.KENNO | |
| DBIGE | 362644.76N/1163629.61W | Y | FB | TF | 316.98 | 45.21 | AT/ABOVE 21000 | | | |
| BIKKR | 363400.00N/1164500.00W | Y | FB | TF | 316.61 | 9.98 | AT/ABOVE 21000 | | | |
| KENNO | 371753.37N/1171836.81W | Y | FB | TF | 328.58 | 51.45 | | | | |
| | | | | | | | | | | |