

**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SUPERSEDED NUMBER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> |
|----------------|---------------|-------------------------|--------------------------|--------------|------------------------------|
| WNGSS | ONE | WNGSS1.WNGSS | NONE | | 26 MAR 20 |

| <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:**CENTENNIAL KAPA:**

TAKEOFF RW17L/R: CLIMB ON HEADING 169.95 TO 6385, THEN ON HEADING 169.95 OR AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW35L/R: CLIMB ON HEADING 349.95 TO 6385, THEN ON HEADING 349.95 OR AS ASSIGNED BY ATC. THENCE...

COLORADO AIR AND SPACE PORT KCFO:

TAKEOFF RW08: CLIMB ON A HEADING BETWEEN 312 CW 228 AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW17: CLIMB ON A HEADING BETWEEN 352 CW 229 AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW26: CLIMB ON A HEADING BETWEEN 315 CW 083 AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW35: CLIMB ON A HEADING BETWEEN 313 CW 172 AS ASSIGNED BY ATC. THENCE...

GREELEY-WELD COUNTY KGXY:

TAKEOFF RW10: CLIMB ON A HEADING BETWEEN 292 CW 214 AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW17: CLIMB ON A HEADING BETWEEN 350 CW 212 AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW28: CLIMB ON A HEADING BETWEEN 294 CW 097 OR BETWEEN 097 CW 209 AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW35: CLIMB ON A HEADING BETWEEN 293 CW 169 AS ASSIGNED BY ATC. THENCE...

NORTHERN COLORADO RGNL KFNL:

TAKEOFF RW15: CLIMB ON A HEADING BETWEEN 350 CW 180 AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW33: CLIMBING RIGHT TURN ON A HEADING BETWEEN 350 CW 150 AS ASSIGNED BY ATC. THENCE...

ROCKY MOUNTAIN METROPOLITAN KBJC:

TAKEOFF RW12L/R: CLIMB ON A HEADING BETWEEN 350 CW 150 AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW30L/R: CLIMBING RIGHT TURN ON A HEADING BETWEEN 350 CW 113 AS ASSIGNED BY ATC. THENCE...

VANCE BRAND KLMO:

TAKEOFF RW11: CLIMB ON A HEADING BETWEEN 030 CW 160 AS ASSIGNED BY ATC. THENCE...

TAKEOFF RW29: CLIMBING RIGHT TURN ON A HEADING BETWEEN 030 CW 110 AS ASSIGNED BY ATC. THENCE...

ALL AIRPORTS:

...EXPECT RADAR VECTORS TO CROSS BUMPZ AT 8,000 THEN ON TRACK 244.34/11.53 TO CROSS WNGSS AT OR ABOVE 12000 THEN ON (TRANSITION) MAINTAIN FL230 OR FILED LOWER ALTITUDE.

EXPECT HIGHER

FILED ALTITUDE TEN 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> |
|------------------------|-------------------------------------|----------------------------|--------------------------|---------------|-----------------|------------|-------------|------------------------------------|
| CHNGY | WNGSS1.CHNGY | WNGSS | ZENLO | TRACK 291.53 | 10.00 | 14000 | 12300 | ZENLO AT/ABOVE 15000 |
| | | ZENLO | ZIMMR | TRACK 291.07 | 12.89 | 17000 | 14800 | ZIMMR AT/ABOVE 17000 |
| | | ZIMMR | CHNGY | TRACK 265.82 | 37.28 | 17000 | 15200 | |
| WERNR | WNGSS1.WERNR | WNGSS | COUSN | TRACK 245.87 | 10.00 | 14000 | 11400 | COUSN AT/ABOVE 15000 |
| | | COUSN | CONNRR | TRACK 245.74 | 11.04 | 17000 | 13800 | CONNRR AT/ABOVE 17000 |

QUALITY
3
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> | | |
|----------------|--------------|---------------|-------------------------|--------------------------|--------------|------------------------------|-------|----------------------------|
| WNGSS | | ONE | WNGSS1.WNGSS | NONE | | 26 MAR 20 | | |
| | CONN | | WERNR | TRACK 252.07 | 47.44 | 17000 | 16500 | |
| BLUE MESA | WNGSS1.HBU | WNGSS | BUBLS | TRACK 224.35 | 10.00 | 15000 | 12000 | BUBLS AT/ABOVE 15000 |
| | | BUBLS | BRANF | TRACK 224.24 | 05.80 | 16000 | 13100 | BRANF AT/ABOVE 16000 |
| | | BRANF | BAYLR | TRACK 224.17 | 07.08 | 17000 | 16500 | BAYLR AT/ABOVE 17000 |
| | | BAYLR | BOBBA | TRACK 242.39 | 28.04 | 17000 | 16500 | |
| | | BOBBA | HBU VOR/DME | TRACK 207.54 | 69.22 | 17000 | 16700 | HBU VOR/DME AT/BELOW FL230 |
| TEHRU | WNGSS1.TEHRU | WNGSS | BUBLS | TRACK 224.35 | 10.00 | 15000 | 12000 | BUBLS AT/ABOVE 15000 |
| | | BUBLS | BRANF | TRACK 224.24 | 05.80 | 16000 | 13100 | BRANF AT/ABOVE 16000 |
| | | BRANF | BAYLR | TRACK 224.17 | 07.08 | 17000 | 16500 | BAYLR AT/ABOVE 17000 |
| | | BAYLR | BOBBA | TRACK 242.39 | 28.04 | 17000 | 16500 | |
| | | BOBBA | TEHRU | TRACK 242.02 | 26.52 | 17000 | 16500 | |
| VOAXA | WNGSS1.VOAXA | WNGSS | KINLE | TRACK 273.23 | 10.00 | 14000 | 11800 | KINLE AT/ABOVE 15000 |
| | | KINLE | COORZ | TRACK 272.96 | 13.08 | 17000 | 15600 | COORZ AT/ABOVE 17000 |
| | | COORZ | VOAXA | TRACK 255.71 | 37.90 | 17000 | 15800 | |

PROCEDURAL DATA NOTES:

NOTE: DME/DME/IRU OR GPS REQUIRED.

NOTE: RNAV 1.

NOTE: TURBOJETS ONLY.

NOTE: RADAR REQUIRED.

NOTE: ACCELERATE TO 250 KT OR GREATER UPON REACHING 10000. IF SLOWER SPEED IS REQUIRED TO MEET CROSSING RESTRICTIONS ADVISE CLNC DEL PRIOR TO TAXI.

TAKEOFF MINIMUMS:**CENTENNIAL KAPA:**

RWYS 10, 28 NA

RWY 17L STANDARD WITH MINIMUM CLIMB OF 255 FT PER NM TO 8000

RWY 17R STANDARD WITH MINIMUM CLIMB OF 370 FT PER NM TO 8000

RWY 35L, 35R STANDARD

COLORADO AIR AND SPACE PORT KCFO:

RWY 8, 17, 26, 35 STANDARD

GREELEY-WELD COUNTY KGXY:

RWY 10, 17, 28, 35 STANDARD

NORTHERN COLORADO RGNL KFNL:

RWYS 6, 24 NA

RWY 15, 33 STANDARD

ROCKY MOUNTAIN METROPOLITAN KBJC:

RWYS 3, 21 NA

RWY 12L/R, 30L/R STANDARD

QUALITY
3
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> |
|----------------|---------------|-------------------------|--------------------------|--------------|------------------------------|
| WNGSS | ONE | WNGSS1.WNGSS | NONE | | 26 MAR 20 |

VANCE BRAND KLMO:

RWY 11 STANDARD

RWY 29 STANDARD WITH MINIMUM CLIMB OF 370 FT PER NM TO 8000.

TAKEOFF OBSTACLES NOTES:

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

CONTROLLING OBSTACLES:

CENTENNIAL:

RWY 17L: 6569 FT MSL AAO 392953.93N/1046044.26W.

RWY17R: 6021 FT MSL OBS BLDG 393302.52N/1045119.43W (CG), 6559 FT MSL AAO 392953.93N/1045044.26W (CGTA).

VANCE BRAND:

RWY 29: 6179 FT MSL AAO 401357.20N/1051150.87W.

OBSTACLES MANDATING ROUTE DEVELOPMENT:

CENTENNIAL:

RWY 17L/R: 13591 FT MSL AAO 395019.70N/1054255.40W, 14470 FT MSL AAO 393807.40N/1054902.40W, 12995 FT MSL AAO 384926.53N/1050138.90W.

RWY 35L/R: 13591 FT MSL AAO 395019.70N/1054255.40W, 14470 FT MSL AAO 393807.40N/1054902.40W, 14310 FT MSL AAO 385020.60N/1050238.00W.

COLORADO AIR AND SPACE PORT:

RWY 8: 14464 FT MSL AAO 393517.70N/1053838.00W, 14455 FT MSL AAO 401511.20N/1053651.40W.

RWY 17: 14464 FT MSL AAO 393517.70N/1053838.00W.

RWY 26: 14464 FT MSL AAO 393517.70N/1053838.00W, 14455 FT MSL AAO 401511.20N/1053651.40W.

RWY 35: 14455 FT MSL AAO 401511.20N/1053651.40W.

GREELEY-WELD COUNTY:

RWY 10:14455 FT MSL AAO 401519.05N/1053628.56W, 10920 MSL AAO 403043.86N/1052635.42W, 11847 MSL AAO 401043.35N/1053351.27W.

RWY 17:14455 FT MSL AAO 401519.05N/1053628.56W, 10920 MSL AAO 403043.86N/1052635.42W, 11847 MSL AAO 401043.35N/1053351.27W.

RWY 28:14455 FT MSL AAO 401519.05N/1053628.56W, 10920 MSL AAO 403043.86N/1052635.42W, 11847 MSL AAO 401043.35N/1053351.27W.

RWY 35:14455 FT MSL AAO 401519.05N/1053628.56W, 10920 MSL AAO 403043.86N/1052635.42W, 11847 MSL AAO 401043.35N/1053351.27W.

NORTHERN COLORADO RGNL:

RWY 15: 14470 FT MSL AAO 393518.83N/1053829.25W, 14455 MSL AAO 401511.20N/1053651.40W.

RWY 33: 7159 FT MSL AAO 403802.63N/1051418.62W, 14455 MSL AAO 401511.20N/1053651.40W.

ROCKY MOUNTAIN METROPOLITAN:

RWY 12L/R: 14470 FT MSL AAO 393607.40N/1054902.40W, 12348 FT MSL AAO 403111.11N/10533512.76W, 9222 FT MSL AAO 393343.86N/1051525.75W.

RWY 30L/R: 14470 FT MSLAAO 393807.40N/1054902.40W, 12348 FT MSL AAO 403111.11N/10533512.76W, 14431 FT MSL AAO 391427.57N/1052950.60W.

VANCE BRAND:

RWY 11: 13575 FT MSL AAO 393327.70N/1053613.80W.

RWY 29: 14459 FT MSL AAO 401511.20N/1053651.40W.

LOST COMMUNICATIONS PROCEDURES:**ADDITIONAL FLIGHT DATA:**

KAPA: REF MAG VAR 8E, EPOCH YR 2015

DME/DME ASSESSMENT: SAT (RNP 2.0)

CHART TOP ALTITUDE: FL230

AIRPORTS SERVED:

| <u>AIRPORT NAME</u> | <u>AIRPORT ID</u> | <u>CITY</u> | <u>STATE</u> |
|---------------------|-------------------|-------------|--------------|
| CENTENNIAL | KAPA | DENVER | CO |



| <u>DP NAME</u> | <u>NUMBER</u> | <u>DP COMPUTER CODE</u> | <u>SUPERSEDED NUMBER</u> | <u>DATED</u> | <u>ACTUAL EFFECTIVE DATE</u> |
|-----------------------------|---------------|-------------------------|--------------------------|--------------|------------------------------|
| WNGSS | ONE | WNGSS1.WNGSS | NONE | | 26 MAR 20 |
| ROCKY MOUNTAIN METROPOLITAN | KBJC | | DENVER | | CO |
| COLORADO AIR AND SPACE PORT | KCFO | | DENVER | | CO |
| NORTHERN COLORADO RGNL | KFNL | | FORT COLLINS/LOVELAND | | CO |
| GREELEY-WELD COUNTY | KGXY | | GREELEY | | CO |
| VANCE BRAND | KLMO | | LONGMONT | | CO |

COMMUNICATIONS:

KAPA: ATIS, CLNC DEL, DEN DEP CON

KBJC: ATIS, CLNC DEL, DEN DEP CON

KCFO: ATIS, CLNC DEL, DEN DEP CON, DENVER CLNC DEL (WHEN TOWER CLOSED)

KFNL: CLNC DEL, DEN DEP CON

KGXY: CLNC DEL, DEN DEP CON

KLMO: DEN DEP CON

FIXES AND/OR NAVAIDS:**REMARKS:****FLIGHT INSPECTED BY**

BRYAN VEIT

OFFICE

FICO

DATE

1/19/20

DEVELOPED BY

AUSTIN GOTCHER

*Digitally signed by***AUSTIN GOTCHER**

Dec 09, 2019

OFFICE

AJV-A422

DATE

10/17/2019

APPROVED BY

MARLON ROBINSON

OFFICE

AJV-A420

DATE**TITLE**

MANAGER

REQUIRED EFFECTIVE DATE

ROUTINE

COORDINATED WITH:
A4A ☐
ALPA ☒
AOPA ☒
APA ☒
HAI ☐
NBAA ☒
OTHER: ZDV, DEN DEP CON, AMGR.
CHANGES - REASONS:

**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> |
|-------------------|------------------------|---------------|--------------|-------------------------|-----------|--------------------------|-----------------|--------------|------------------------------|
| WNGSS | | ONE | | WNGSS1.WNGSS | | NONE | | | 26 MAR 20 |
| <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> |
| BUMPZ | 395044.56N/1045925.83W | Y | - | IF | - | - | AT 8000 | | |
| WNGSS | 394713.69N/1051340.89W | Y | FB | TF | 252.34 | 11.53 | | | |
| WNGSS | 394713.69N/1051340.89W | Y | - | IF | - | - | AT/ABOVE 12000 | | WNGSS1.CHNGY |
| ZENLO | 395209.14N/1052458.91W | Y | FB | TF | 299.53 | 10.00 | AT/ABOVE 15000 | | |
| ZIMMR | 395824.42N/1053938.41W | Y | FB | TF | 299.07 | 12.89 | AT/ABOVE 17000 | | |
| CHNGY | 400043.48N/1062803.36W | Y | FB | TF | 273.82 | 37.28 | | | |
| WNGSS | 394713.69N/1051340.89W | Y | - | IF | - | - | AT/ABOVE 12000 | | WNGSS1.WERNR |
| COUSN | 394426.22N/1052608.10W | Y | FB | TF | 253.87 | 10.00 | AT/ABOVE 15000 | | |
| CONNR | 394119.79N/1053951.84W | Y | FB | TF | 253.74 | 11.04 | AT/ABOVE 17000 | | |
| WERNR | 393252.65N/1064016.63W | Y | FB | TF | 260.07 | 47.44 | | | |
| WNGSS | 394713.69N/1051340.89W | Y | - | IF | - | - | AT/ABOVE 12000 | | WNGSS1.HBU |
| BUBLS | 394106.40N/1052356.20W | Y | FB | TF | 232.35 | 10.00 | AT/ABOVE 15000 | | |
| BRANF | 393732.95N/1052952.25W | Y | FB | TF | 232.24 | 05.80 | AT/ABOVE 16000 | | |
| BAYLR | 393311.99N/1053706.04W | Y | FB | TF | 232.17 | 07.08 | AT/ABOVE 17000 | | |
| BOBBA | 392341.94N/1061110.06W | Y | FB | TF | 250.39 | 28.04 | | | |
| HBU VOR/DME | 382707.62N/1070222.97W | Y | FB | TF | 215.54 | 69.22 | AT/BELOW FL230 | | |
| WNGSS | 394713.69N/1051340.89W | Y | - | IF | - | - | AT/ABOVE 12000 | | WNGSS1.TEHRU |

QUALITY
3
CHECKED

| DP NAME | | NUMBER | | | | | DP COMPUTER CODE | | SUPERSEDED NUMBER | | DATED | ACTUAL EFFECTIVE DATE |
|------------|------------------------|--------|-------|----------|--------|-----------|------------------|-------|-------------------|---------|-------|-----------------------|
| WNGSS | | ONE | | | | | WNGSS1.WNGSS | | NONE | | | 26 MAR 20 |
| FIX/NAVAID | LAT/LONG | C | FO/FB | LEG TYPE | TC | DIST (NM) | ALTITUDE | SPEED | | REMARKS | | |
| BUBLS | 394106.40N/1052356.20W | Y | FB | TF | 232.35 | 10.00 | AT/ABOVE 15000 | | | | | |
| BRANF | 393732.95N/1052952.25W | Y | FB | TF | 232.24 | 05.80 | AT/ABOVE 16000 | | | | | |
| BAYLR | 393311.99N/1053706.04W | Y | FB | TF | 232.17 | 07.08 | AT/ABOVE 17000 | | | | | |
| BOBBA | 392341.94N/1061110.06W | Y | FB | TF | 250.39 | 28.04 | | | | | | |
| TEHRU | 391433.38N/1064315.21W | Y | FB | TF | 250.02 | 26.52 | | | | | | |
| | | | | | | | | | | | | |
| WNGSS | 394713.69N/1051340.89W | Y | - | IF | - | - | AT/ABOVE 12000 | | WNGSS1.VOAXA | | | |
| KINLE | 394909.90N/1052624.70W | Y | FB | TF | 281.23 | 10.00 | AT/ABOVE 15000 | | | | | |
| COORZ | 395138.10N/1054305.60W | Y | FB | TF | 280.96 | 13.08 | AT/ABOVE 17000 | | | | | |
| VOAXA | 394718.42N/1063157.67W | Y | FB | TF | 263.71 | 37.90 | | | | | | |

QUALITY
3
CHECKED