



ZDV/ZAB
LOA

SUBJ: Albuquerque ARTCC and Denver ARTCC Letter of Agreement

This order was established to provide Standard Operating Procedures and Standard Coordination Procedures for Albuquerque ARTCC (vZAB) and Denver ARTCC (vZDV) and is supplementary to FAA Order 7110.65, Air Traffic Control.

/Austin Wilkins/
Air Traffic Manager
Denver ARTCC

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Albuquerque ARTCC

Effective 11/20/2022

This order cancels all previous ZDV/ZAB LOA(s)

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Section 1 - Introduction

1-1-1. Audience

All vZDV controllers and visitors contained within the vZDV, vZAB, and VATUSA roster.

1-1-2. Distribution

This document is authorized for unrestricted use and release.

1-1-3. Effective

This order is effective upon immediate release and cancels all previous versions and publications of the VATSIM ZAB/ZDV LOA.

1-1-4. Change Log

All significant changes shall be maintained in the change log contained in Section 2 of this document

1-1-6. Deviations from Procedures

If an operational advantage or an increase in system efficiency can be achieved and an equivalent degree of safety maintained, deviations from the procedures established in this Order may be affected after coordination is accomplished completely defining the responsibilities in each case as follows:

- a. On an individual basis, after coordination between controllers involved has been accomplished;
- b. On other than an individual basis, after coordination between TMU/CICs involved, these deviations must specify a time period for cancellation.

Section 2 - Change Log

Revision Number	Revision Effective Date	Changelog	Revised By	Approvals
1	11/20/2022	New Release	Austin Wilkins ZDV ATM	Austin Wilkins ZDV ATM Jeremy Werderman ZAB ATM

Table 2-2-1

Section 3 - Procedures

3-1. Interfacility Procedures

- a. Altitude information contained in the data block, including an interim altitude, is sufficient for coordination.
- b. A controller making an interfacility radar handoff, point-out, or issuing traffic information to another controller, need not verbally coordinate the altitude the aircraft is climbing/descending to, or is maintaining, as long as the data block accurately reflects this information.
 - i. Pilot's discretion descent must be coordinated within the receiving controllers' stratum.
- c. The procedures above do not constitute coordination/approval of inappropriate altitude for direction of flight requirements.
- d. Beacon codes may be changed upon receipt of radar identification.
- e. Both facilities shall have control for speed changes on contact.
- f. Both facilities shall have control for 20 degree turns left or right of course within 20 nautical miles from the common boundary.
- g. For aircraft with cruise altitudes above the transferring controller's sector, the transferring controller shall climb the aircraft to the top of the transferring controller's sector and initiate a radar handoff to the overlying controller. Once a radar handoff and voice has been transferred to the receiving controller, the receiving controller has control of the aircraft for climbs into their airspace.
- h. Aircraft unable to comply with required routes or altitudes must be coordinated with the receiving ARTCC on an individual basis.
- i. The RNAV (GPS) RWY 13 approach to the Taos Municipal Airport (SKX), Taos, New Mexico, has protected airspace associated with the holding pattern that extends into ZDV's airspace. Therefore, ZAB must advise ZDV when the holding pattern will be used, the specific altitude(s), and when the holding pattern is no longer in use.

3-2. Point-Out Altitude Requirements

- a. A controller making an intra-facility point-out may omit altitude information, as long as the data block accurately reflects this information.
 - i. Pilot's discretion climb/descent must be verbally coordinated.
 - ii. When utilizing automated point-outs, verbal coordination must be utilized for IAFDOF and non-RVSM aircraft.

Section 4. ZAB Standard Sectorization

4-1. ZAB Single Sector Operations

- a. ZDV shall hand all aircraft to ZAB sector 16.

4-2. ZAB Two Sector Operations

- a. [“Low/Hi” \(Low/Hi Split\)](#)
 - 1. ZDV hands aircraft AOB FL240 to 16.
 - 2. ZDV hands aircraft AOA FL250 to 91.
- b. [“North/South” \(North/South Split\)](#)
 - i. ZAB staffs 16/63.
 - ii. ZDV hands ALL to 16.
- c. [“Heavy East” \(East/West Split\)](#)
 - i. ZAB staffs 16/15.
 - ii. ZDV hands:
 - 1. Aircraft W of V263 (TBE-CIM) to 16; and
 - 2. Aircraft E of V263 (TBE-CIM) to 15.
- d. [“Heavy West” \(East/West Split\)](#)
 - i. ZAB staffs 16/43.
 - ii. ZDV hands:
 - 1. Aircraft W of RSK to 43; and
 - 2. Aircraft on J161 and E of RSK to 16.

4-3. ZAB Three Sector Operations

- a. [“Albuquerque Split”](#)
 - i. ZAB staffs 16/15/43.
 - ii. ZDV hands:
 - 1. Aircraft W of RSK to 43; and
 - 2. Aircraft on J161 and E of RSK to 16; and
 - 3. Aircraft W of V263 (TBE-CIM) to 16; and
 - 4. Aircraft E of V263 (TBE-CIM) to 15.
- b. [“Phoenix Split”](#)
 - i. ZAB staffs 16/43/91.
 - ii. ZDV hands:
 - 1. Aircraft W of RSK to 43; and
 - 2. Aircraft on J161 and E of RSK to 16.
- c. [“Amarillo Split”](#)
 - i. ZAB staffs 16/15/63.
 - ii. ZDV hands:
 - 1. Aircraft W of V263 (TBE-CIM) to 16; and
 - 2. Aircraft E of V263 (TBE-CIM) to 15.

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- d. ["El Paso Split"](#)
 - i. ZAB staffs 16/63.
 - ii. ZDV hands ALL to 16.
- e. ["Roswell Split"](#)
 - i. ZAB staffs 16/43/63.
 - ii. ZDV hands:
 - 1. Aircraft W of RSK to 43; and
 - 2. Aircraft on J161 and E of RSK to 16.
- f. ["Tucson Split"](#)
 - i. ZAB staffs 16/15/91.
 - ii. ZDV hands:
 - 1. Aircraft W of V263 (TBE-CIM) to 16; and
 - 2. Aircraft E of V263 (TBE-CIM) to 15.

Space left intentionally blank

4-4. ZAB Four Or More Sector Operations

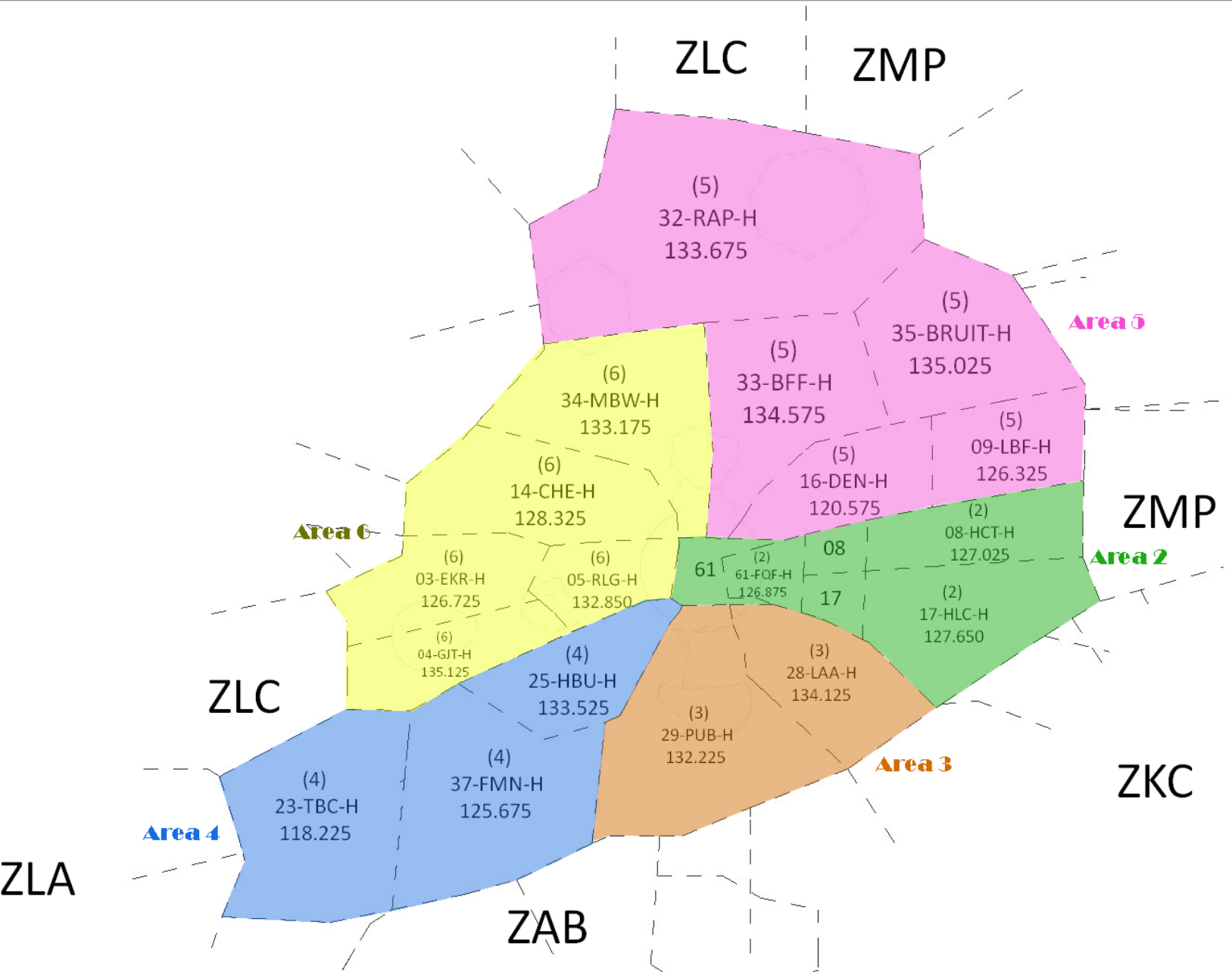


Split 1	Split 2	Split 3	Information
16			DEFAULT COMBINED
16	91		LO/HI [91 AOA FL250]
16	63		N/S [16+43+15] [63+91]
16	15		E/W [16+43+91] [15+63]
16	43		E/W [16+15+63] [43+91]
16	43	15	ABQ [43+91] [15+63]
16	43	91	PHX [16+15+63]
16	63	15	AMA [16+43] [63+91]
16	63	91	ELP [16+43+15]
16	63	43	ROW [16+15] [43+91]
16	15	91	TUS [16+43] [15+63]

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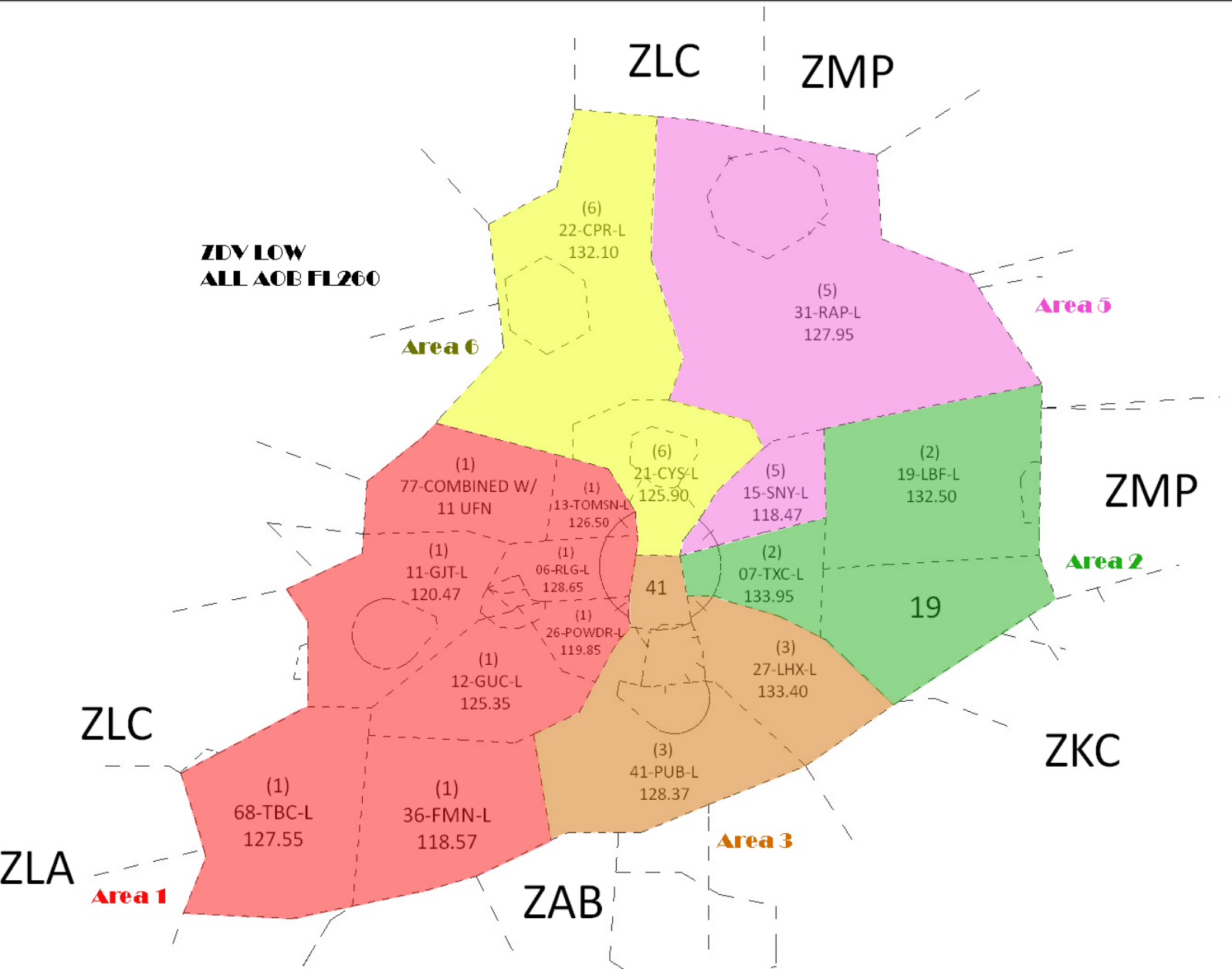
Section 5. ZDV Standard Sectorization

5-1. ZDV High Sectors



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5-2. ZDV Low Sectors



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5-3. ZDV Single Sector Operations

- a. ZAB shall handoff to ZDV sector 17.

5-4. ZDV Standard Splits

- a. "East/West" High Split
 - i. ZAB shall hand:
 - 1. Area 2, 3, 5 traffic to sector 17.
 - 2. Area 4, 6 traffic to sector 25.
- b. "High/Low" Split
 - i. All aircraft AOA FL270 to appropriate high area/sector
 - ii. All aircraft AOB FL260 to appropriate low area/sector
 - 1. Combined low is sector 22.
- c. All other splits shall be coordinated to ZAB directly as ZDV now has the ability to split down to the individual sector.
- d. All other ZDV operational positions are as follows:
 - i. Operations Desk

Position	Callsign	Frequency
ZDV TMU	DEN_E_TMU	199.997

- ii. Area 1 - DEN_1_CTR

Position	Callsign	Frequency
06 RLG LOW	DEN_06_CTR	128.650
11 GJT LOW	DEN_11_CTR	120.475
12 GUC LOW	DEN_12_CTR	125.350
13 TOMSN LOW	DEN_13_CTR	126.500
26 POWDR LOW	DEN_26_CTR	119.850
36 FMN LOW	DEN_36_CTR	118.575
68 TBC LOW	DEN_68_CTR	127.550
77 HDN LOW	DEN_77_CTR	120.475

iii. Area 2 - DEN_2_CTR

Position	Callsign	Frequency
07 TXC LOW	DEN_07_CTR	133.950
08 HCT HIGH	DEN_08_CTR	127.025
17 HLC HIGH	DEN_17_CTR	127.650
19 LBF LOW	DEN_19_CTR	132.50
61 FQF HIGH	DEN_61_CTR	126.875

iv. Area 3 - DEN_3_CTR

Position	Callsign	Frequency
27 LHX LOW	DEN_27_CTR	133.400
28 LAA HIGH	DEN_28_CTR	134.125
29 PUB HIGH	DEN_29_CTR	132.225
41 PUB LOW	DEN_41_CTR	128.370

v. Area 4 - DEN_4_CTR

Position	Callsign	Frequency
23 TBC HIGH	DEN_23_CTR	118.225
25 HBU HIGH	DEN_25_CTR	133.525
37 FMN HIGH	DEN_37_CTR	125.675

vi. Area 5 - DEN_5_CTR

Position	Callsign	Frequency
09 LBF HIGH	DEN_09_CTR	126.325
15 SNY LOW	DEN_15_CTR	118.475
16 DEN HIGH	DEN_16_CTR	120.575

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31 RAP LOW	DEN_31_CTR	127.950
32 RAP HIGH	DEN_32_CTR	133.675
33 BFF HIGH	DEN_33_CTR	134.575
35 BRUIT HIGH	DEN_35_CTR	135.025

vii. Area 6 - DEN_6_CTR

Position	Callsign	Frequency
03 EKR HIGH	DEN_03_CTR	126.725
04 GJT HIGH	DEN_04_CTR	135.125
05 RLG HIGH	DEN_05_CTR	132.850
14 CHE HIGH	DEN_14_CTR	128.325
21 CYS LOW	DEN_21_CTR	125.900
22 CPR LOW	DEN_22_CTR	132.100
34 MBW HIGH	DEN_34_CTR	133.175

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Section 6. ZDV Required Routings

LANDING ARPT	QUALIFIER	ROUTE/RESTRICTION
DEN	On or W of J104 AOA FL240	*RSK/HBU/ALS LARKS# STAR or GNDLA/SHNPS TBARR# STAR
	E of J104 AOA FL240	*HGO or ZIGEE NIIXX# STAR
	East of ZDV Sectors 37/38. All aircraft at any altitude.	Enter ZDV AOB FL370.
COS/PUB	From ZAB Sector 70. AOA FL290. All aircraft.	Route via J13 ALS DBRY STAR
	From ZAB Sectors 70/71/72. All aircraft at any altitude.	Enter ZDV AOB FL340.
APA	On or west of J104. AOA FL240. All aircraft.	Route over * RSK/ HBU/ALS LARKS STAR or STIFS ZOMBZ STAR.
	East of J104. AOA FL240. All aircraft.	Route over *BRK..FQF or CAARS DUNNN STAR.
BJC	On or west of J104. AOA FL240. All aircraft.	Route over HBU POWDR STAR.
	East of J104. AOA FL240. All aircraft.	Route over *BRK..FQF or CAARS DUNNN STAR.
ASE	To ZDV Sectors 29, 30, 41, 46. All aircraft.	Route over KANON..HAREI..DBL.
DRO	From ZAB Sector 70/16. All aircraft.	Enter ZDV AOB FL260.

*Denotes non-rnav required routing

Section 7. ZAB Required Routing

LANDING ARPT	QUALIFIER	ROUTE/RESTRICTION
ABQ	From DEN AOA FL320	AOB FL320
	From RSK AOA FL290	AOB FL290
DFW	ALL	AOA FL270 via PNH, BGD, or TXO
PHX Satellites (SDL, CHD, FFZ, GEU, GYR, DVT, IWA, CGZ)	All turbojet	Over or W of RSK VORTAC then Direct FLG VORTAC Enter ZAB AOB FL340
PHX	All AOA FL270	Route via GUP EAGUL STAR
SKX	Landing RWY 13 (RNAV)	(VMC ONLY) ZOTOS AOB FL180 then Direct SKX airport Or ZOTOS AOB FL180 Expect published hold @ OQUDI Handoff to ZAB no later than ZOTOS Expect RNAV (GPS) RWY 13
	Landing RWY 4 (RNAV)	Route via TAS TELOY Cross TAS at 15,000 Expect RNAV (GPS) RWY 4
	ALL (Non-RNAV)	Route via TAS TELOY Cross TAS at 15,000
AXX	From W (RNAV)	<First Aircraft> Clear aircraft for approach from AXIPE <Additional Aircraft> Direct AXIPE AOA 15,000 Hold NW of AXIPE R300, R Turns, 5 mile legs Obtain EFC time from ZAB Provide radar separation until

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		radar handoff accepted by ZAB.
	From N (RNAV)	<p><First Aircraft> Clear aircraft for approach from OMLEE</p> <p><Additional Aircraft> Direct OMLEE AOA 15,000 Hold N of OMLEE R360, R Turns, 3 mile legs Obtain EFC time from ZAB Provide radar separation until radar handoff accepted by ZAB.</p>
	From E (RNAV)	<p><First Aircraft> Clear aircraft for approach from GEKTE</p> <p><Additional Aircraft> Direct GEKTE AOA 15,000 Hold NE of GEKTE R030, L Turns, 5 mile legs Obtain EFC time from ZAB Provide radar separation until radar handoff accepted by ZAB.</p>
	ALL from N or W (Non-RNAV)	Direct TAS Cross TAS AOB FL190
	ALL from E (Non-RNAV)	Direct FENON Cross FENON AOB FL190

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