



ZDV-D01
LOA

SUBJ: Denver Center and Denver TRACON - Letter of Agreement

This Letter of Agreement establishes the procedures for handling air traffic between Denver Air Route Traffic Control Center and Denver Terminal Radar Approach Control. The provisions and procedures described below are supplemental to and in accordance with Denver ARTCC General Policy and FAA Order JO 7110.65, as well as any published FAA guidelines and procedures. The information contained in this document is to be used for flight simulation purposes only on the VATSIM network. It is not intended, nor should it be used for real-world navigation. This site is not affiliated with the FAA, the actual Denver ARTCC, or any governing aviation body. All content contained herein is approved only for use on the VATSIM network.

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Section 1 - Introduction

1-1. Audience

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

1-2. Distribution

This document is authorized for unrestricted use and release for vZDV personnel only.

1-3. Effective

This order is effective upon immediate release and cancels all previous versions and publications of the ZDV-D01 LOA.

1-4. Change Log

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

Section 2 - Change Log

2-1. See Table 2-2-1 for the changelog.

Revision Number	Revision Effective Date	Changelog	Revised By	Approvals
1.0	10/7/2021	Initial Release	Austin Wilkins	Austin Wilkins ATM

Table 2-2-1

Section 1. Definitions

- a. Aircraft groups are defined as follows:
 - i. Group A – Jet Aircraft.
 - ii. Group B – Aircraft other than jets with a filed True Airspeed (TAS) of more than 210 knots.
 - iii. Group C – Aircraft with a filed TAS of 210 knots or less.
- b. Arrival Gates: Each Arrival Gate consists of the following STARs:
 - i. LAWGR – AALLE#, LAWGR#, LANDR#, KOHOE#
 - ii. CLASH – CLASH#, NIIXX#, DANDD#, QUAIL#
 - iii. SSKII – SSKII#, TBARR#, POWDR#, LARKS#
 - iv. LONGZ – FLATI#, LONGZ#, RAMMS#, TOMSN#
- c. RNAV Gate Fixes: AALLE, LAWGR, NIIXX, CLASH, SSKII, TBARR, FLATI, LONGZ.
- d. Non-RNAV Gate Fixes: RAAMS, TOMSN, POWDR, LARKS, DANDD, QUAIL, LANDR
- e. Converging Fixes: HEDDD, PPINT, EVRLY, HAGGR, MNARK, BGDEE, FLNEL, ELLDO
- f. Miles in trail are measured from when the preceding aircraft of the same group crosses the TRACON boundary, accounting for compression.
- g. Long-side/Short-side runway transitions:
 - i. Long-side (LSGO) – refers to the runway transitions on which aircraft will first join a downwind leg.
 - ii. Short-side refers to the runway transitions on which aircraft will first join a base leg.

Section 2. Procedures

- a. General
 - i. All Group A RNAV-equipped aircraft must be on an RNAV STAR or SID unless otherwise coordinated or required in Attachment 2.
- b. Arrivals
 - i. All Denver Terminal Area arrivals must comply with the routes, altitudes, and speeds in Attachment 2.
 - ii. Control and separation responsibilities:
 - 1. The TRACON has control of all Denver Terminal Area arrivals for speed increases upon communications transfer.
 - 2. The TRACON has control of all Satellite Airport arrivals within 10 nautical miles of the TRACON boundary for turns of up to 20 degrees and descent.
 - iii. Denver Group A arrival aircraft must be established on the RNAV STAR at or before the RNAV gate fix. RNAV and Non-RNAV Denver Group A arrival aircraft shall be sequenced together.
 - iv. Denver Group A arrival aircraft shall be issued either "Descend via" the RNAV STAR with an assigned Directional Transition (Center shall enter the assigned directional transition runway into the scratchpad) or a crossing restriction in accordance with Attachment 2 unless one of the following is exhibited:

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1. When a Denver RNAV arrival on a “Descend Via” clearance will conflict with a satellite Group A arrival on the same lateral path as the SSKII arrival gate, the Center must issue “descend via (STAR/directional transition) except maintain FL190.”
 2. When a “Descend Via” clearance will conflict with a Group B or C overflight routed on the same lateral path as the LONGZ or SSKII arrival gate, the Center must issue “descend via (STAR/directional transition) except maintain FL190.”
- v. Long Side Gate Operations: Unless otherwise coordinated, the Center must ensure that aircraft assigned a runway transition to the same runway cross the RNAV Gate Fixes at least 5 miles in trail regardless of RNAV STAR.
 - vi. Transfer of communications must be completed prior to the RNAV gate fix.
- c. Departures
- i. Aircraft departing the Denver Terminal area must exit through the appropriate departure gate as depicted in Attachment 3.
 - ii. Center has control for climbs on all departures to their filed cruise altitude.
 - iii. Center has control for speed increases and turns up to 30 degrees within the departure gate and within 15 nautical miles of the Center/TRACON common boundary.
 - iv. TRACON must ensure 5 nautical mile separation constant or increasing to all departures.
 - v. TRACON must ensure departures are established on course within 10NM of the Center/TRACON common boundary unless one of the following is exhibited:
 1. North gate departures filed over CYS may be cleared direct CYS.
 2. North gate departures filed over RAP may be cleared direct RAP.
 3. South gate departures filed over PUB may be cleared direct ADANE or direct PUB.
 - vi. Departures must be cleared to FL230 or lower filed altitude unless one of the following is exhibited:
 1. Departures filed to exit TRACON airspace from the DEN001R clockwise to the DEN143R at or below 10,000 MSL must be assigned 9,000 MSL.
 2. Group B and C aircraft filed out the East gate must be assigned an interim altitude of 13,000 MSL or lower filed altitude.
 3. Group B and C aircraft filed out the North, West, and South gate will be assigned an interim altitude of 17,000 MSL when there is a conflict with a Group A aircraft over the same departure route.
- d. Overflights
- i. Center is responsible for routing aircraft transitioning through TRACON airspace on one of the following routes:
 1. RAMMS..DVV..EEONS
 2. TOMSN..FQF..BRK
 3. LANDR..DVV..ZIMMR
 4. SAYGE..FQF..BRK
 5. DANDD..DVV..CYS

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- 6. QUAIL..FQF..BAYLR
 - 7. LARKS..FQF..EPKEE
 - 8. POWDR..DVV..CYS
- ii. Group A and B Colorado Springs (COS) arrivals must be at FL230 or lower filed altitude when on the following routes:

Table 1. Group A and B COS Arrival Routing

Direction	Route
Northwest	TOMSN..FQF..BRK..COS
Northeast	SAYGE..FQF..BRK..COS
Northeast	LANDR..DVV..BRK..COS

- iii. Group C COS arrivals entering departure airspace from the DEN001R clockwise to the DEN143R must be routed via FQF..BRK..COS or DVV..BRK..COS at 8,000 MSL or 10,000 MSL.

Section 4. Miscellaneous

- a. When Denver Center assumes control of Cheyenne Approach delegated airspace:
 - i. Denver Center shall:
 - ii. Clear all KDEN arrivals direct DEN VORTAC.
 - iii. Clear all Denver TRACON satellite field arrivals direct BJC VORTAC, direct destination.
 - iv. Assign all aircraft 11,000 MSL.
- b. Denver TRACON shall:
 - i. Clear all KCYS arrivals direct CYS VORTAC.
 - ii. Assign all aircraft 12,000 MSL.

Section 5. Attachments

Attachment 1. Runway Assignment Charts

NORTH/SOUTH FLOWS							
		WEST HEAVY	EAST HEAVY			WEST HEAVY	EAST HEAVY
NORTH FLOW	AALLE(L)	Landing North	Landing North	SOUTH FLOW	AALLE(L)	Landing South	Landing South
	LAWGR (S)	Landing North	Landing North		LAWGR (S)	Landing South	Landing South
	CLASH (D)	Landing North	Landing North		CLASH (D)	Landing South	Landing South
	NIIXX (Q)	Landing North	Landing North		NIIXX (Q)	Landing South	Landing South
	TBARR (L)	Landing North	Landing North		TBARR (L)	Landing South	Landing South
	SSKII (P)	Landing North	Landing North		SSKII (P)	Landing South	Landing South
	LONGZ (T)	Landing North	Landing North		LONGZ (T)	Landing South	Landing South
	FLATI (R)	Landing North	Landing North		FLATI (R)	Landing South	Landing South

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**RUNWAY ASSIGNMENT CHART
CONVERGING FLOW**

		NORTH/WEST	NORTH/EAST	SOUTH/WEST	SOUTH/EAST	EAST ALL
EAST HEAVY	AALLE(L)	Landing West	Landing East	Landing South	Landing South	Landing East
	LAWGR (S)	Landing West	Landing East	Landing South	Landing South	Landing East
	CLASH (D)	Landing North	Landing North	Landing West	Landing East	Landing East
	NIIXX (Q)	Landing North	Landing North	Landing West	Landing East	Landing East
	TBARR (L)	Landing North	Landing North	Landing West	Landing East	Landing East
	SSKII (P)	Landing North	Landing North	Landing West	Landing East	Landing East
	LONGZ (T)	Landing West	Landing East	Landing South	Landing South	Landing East
	FLATI (R)	Landing West	Landing East	Landing South	Landing South	Landing East

		NORTH/WEST	NORTH/EAST	SOUTH/WEST	SOUTH/EAST	WEST ALL
WEST HEAVY	AALLE(L)	Landing West	Landing North	Landing West	Landing South	Landing West
	LAWGR (S)	Landing West	Landing North	Landing West	Landing South	Landing West
	CLASH (D)	Landing North	Landing North	Landing West	Landing East	Landing West
	NIIXX (Q)	Landing North	Landing North	Landing West	Landing East	Landing West
	TBARR (L)	Landing North	Landing North	Landing South	Landing East	Landing West
	SSKII (P)	Landing North	Landing North	Landing South	Landing East	Landing West
	LONGZ (T)	Landing West	Landing East	Landing South	Landing South	Landing West
	FLATI (R)	Landing West	Landing East	Landing South	Landing South	Landing West

		NORTH/SOUTH	SOUTH/EAST				NORTH/SOUTH	NORTH/WEST
EAST HEAVY	AALLE(L)	Landing South	Landing South	WEST HEAVY	AALLE(L)	Landing South	Landing West	
	LAWGR (S)	Landing South	Landing South		LAWGR (S)	Landing South	Landing West	
	CLASH (D)	Landing North	Landing South		CLASH (D)	Landing North	Landing North	
	NIIXX (Q)	Landing North	Landing South		NIIXX (Q)	Landing North	Landing North	
	TBARR (L)	Landing North	Landing East		TBARR (L)	Landing North	Landing North	
	SSKII (P)	Landing North	Landing East		SSKII (P)	Landing North	Landing North	
	LONGZ (T)	Landing South	Landing East		LONGZ (T)	Landing South	Landing West	
	FLATI (R)	Landing South	Landing East		FLATI (R)	Landing South	Landing West	

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Attachment 2. Arrival STAR/Route Charts

ARRIVAL STAR / ROUTE CHART

LONGZ (Northwest) Gate

Airport	Aircraft Group	Nav Type	Route	Altitude	Speed
KDEN	A	RNAV	FLATI STAR	Descend Via	
			LONGZ STAR	Descend Via	
	Non-RNAV	RAMMS STAR	17,000	250K or less	
		TOMSN STAR	FL190	250K or less	
B	ALL	RAMMS STAR	16,000		
C	ALL	RAMMS STAR	15,000		
KBJC	A	RNAV	PINNR STAR	Descend Via	
		Non-RNAV	V4	15,000	250K or less
	B & C	ALL	V4	13,000 or 11,000	
KAPA	A	RNAV	PINNR STAR	Descend Via	
		Non-RNAV	V4	15,000	250K or less
	B & C	ALL	V4	13,000 or 11,000	
KBKF	Fighters	ALL	TOMSN STAR	FL230	
	A	ALL	V4	15,000	250K or less
	B & C	ALL	V4	13,000 or 11,000	
KFNL/ KGXY/ KCFO/ KLMO	A	RNAV	PINNR STAR	Descend Via	
		Non-RNAV	V4	13,000	250K or less
	B & C	ALL	V4	13,000 or 11,000	
All other TRACON Airports	ALL	ALL	V4	13,000 or 11,000	250K or less

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ARRIVAL STAR / ROUTE CHART

LAWGR (Northeast) Gate

Airport	Aircraft Group	Nav Type	Route	Altitude	Speed
KDEN	A	RNAV	AALLE STAR	Descend Via	
			LAWGR STAR	Descend Via	
		Non-RNAV	LANDR STAR	17,000	250K or less
	B	ALL	LANDR STAR	13,000	
	C	ALL	LANDR STAR	8,000 or 10,000	
KBJC	A	RNAV	BRNKO STAR	Descend Via	
			YOKES..GLL..BJC	14,000	250K or less
	B & C	ALL	Between R & S	10,000 or 12,000	
KAPA	A	RNAV	BRNKO STAR	Descend Via	
			YOKES..GLL..BJC. ..APA	14,000	250K or less
	B & C	ALL	SAYGE..FQF.. DEST	10,000	
KBKF/ KCFO	Fighters	ALL	SAYGE..FQF.. DEST	FL230	
	A	ALL	SAYGE..FQF.. DEST	12,000	250K or less
	B & C	ALL	SAYGE..FQF.. DEST	10,000	
KFNL/ KGXY/ KLMO	A	RNAV	BRNKO STAR	Descend Via	
			YOKES..GLL.. DEST	14,000	250K or less
	B & C	ALL	Between R & S	10,000 or 12,000	
All other TRACON Airports	A	ALL	GLL..DEST	12,000	250K or less
	B & C	ALL	GLL..DEST	10,000	

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ARRIVAL STAR / ROUTE CHART

CLASH (Southeast) Gate

Airport	Aircraft Group	Nav Type	Route	Altitude	Speed
KDEN	A	RNAV	CLASH STAR	Descend Via	
			NIIXX STAR	Descend Via	
	Non-RNAV	DANDD STAR	FL190	250K or less	
		QUAIL STAR	17,000	250K or less	
	B	ALL	DANDD STAR	13,000	
C	ALL	Sector 27/7 Boundary to the DEN143R	10,000		
KBKF	Fighters	ALL	QUAIL STAR	FL230	
	A	ALL	BRK..FQF	Per ZDV.COS LOA	
	B	ALL	QUAIL STAR	11,000	
	C	ALL	Sector 27/7 Boundary to the DEN143R	10,000	
KAPA/ KBJC	A	RNAV	DUNNN STAR	Descend Via	
			Non-RNAV	BRK..FQF	Per ZDV.COS LOA
	B-KAPA	ALL	QUAIL STAR	11,000	
	B-KBJC	ALL	BRK..FQF	Per ZDV.COS LOA	
	C	ALL	Sector 27/7 Boundary to the DEN143R	10,000	
KFNL/ KGXY/ KCFO	A-KFNL /KGXY	ALL	DANDD STAR	FL230	250K or less
	A-KCFO	ALL	DANDD STAR	12,000	250K or less
	B	ALL	DANDD STAR	11,000	
	C	ALL	Sector 27/7 Boundary to the DEN143R	10,000	
All other TRACON Airports	A	ALL	DANDD..DEN VOR..DEST	12,000	250K or less
	B	ALL	DANDD..DEN VOR..DEST	11,000	
	C	ALL	Sector 27/7 Boundary to the DEN143R	10,000	

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ARRIVAL STAR / ROUTE CHART

SSKII (Southwest) Gate

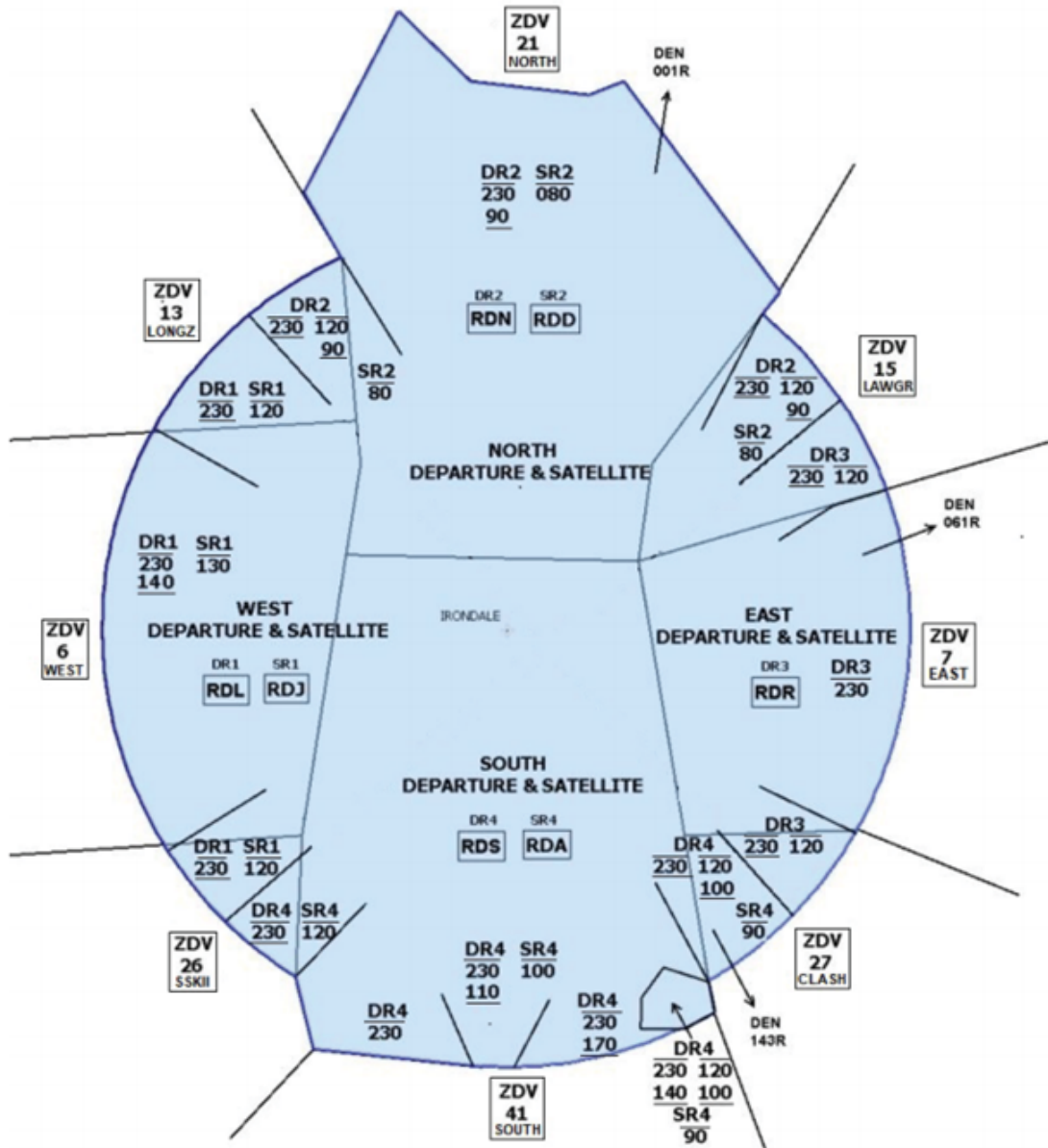
Airport	Aircraft Group	Nav Type	Route	Altitude	Speed
KDEN	A	RNAV	SSKII STAR	Descend Via	
			TBARR STAR	Descend Via	
	Non-RNAV	POWDR STAR	FL190	250K or less	
		LARKS STAR	FL190	250K or less	
	B	ALL	LARKS STAR	17,000	
C	ALL	LARKS STAR	15,000		
KBKF	Fighters	ALL	LARKS STAR	FL230	
KBKF/ KAPA/ KCFO	A	RNAV	ZOMBZ STAR	Descend Via	
		Non-RNAV	LARKS STAR	16,000	250K or less
	B & C	ALL	LARKS STAR	16,000/ 15,000	
KFNL/ KGXY/ KBJC	A-KFNL /KGXY	ALL	POWDR STAR	FL230	250K or less
	A-KBJC	ALL	POWDR STAR	17,000	250K or less
	B	ALL	POWDR STAR	16,000	
	C	ALL	POWDR STAR	15,000	
All other TRACON Airports	A	ALL	POWDR..DEN VOR..DEST	17,000	250K or less
	B	ALL	POWDR..DEN VOR..DEST	16,000	
	C	ALL	POWDR..DEN VOR..DEST	15,000	

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VISUAL DEPICTION OF DENVER TRACON AIRSPACE

DEPARTURE AIRSPACE CHART



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