

LETTER OF AGREEMENT

EFFECTIVE: August 9th, 2026

SUBJECT: Coordination Procedures

1. PURPOSE: This Letter of Agreement establishes procedures for handling air traffic between Denver Center and Denver TRACON

2. CANCELLATION: The Letter of Agreement between ZDV and D01 TRACON, dated October 7th, 2021, is canceled.

3. SCOPE: To establish standard operating procedures for the coordination and control of aircraft between Denver Center and Denver TRACON on the VATSIM network. This letter of agreement is supplemental to vZDV Facility Policy and FAA Order JO 7110.65. The information contained herein 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. The Virtual Denver ARTCC is not affiliated with the FAA, the actual Denver ARTCC, or any governing aviation body.

4. RESPONSIBILITIES: All controllers staffing (or controlling overlying airspace containing) Denver Center and Denver TRACON positions are required to be familiar with the provisions of this document.

5. DEFINITIONS:

a. Aircraft Groups are defined as follows:

(1) Group A - Jet Aircraft

EXCEPTION - SF50 are expected and should be treated as Group B

(2) Group B - Aircraft other than jets with a filed true airspeed (TAS) of more than 210 knots.

(3) Group C - Aircraft with a filed true airspeed (TAS) of 210 knots or less.

b. Arrival Gates: Each Arrival Gate consists of the following STARs:

(1) LAWGR: ALLE, LAWGR, LANDR.

(2) CLASH: CLASH, NIIX, DANND, QUAIL.

(3) SSKII: SSKII, TBARR, POWDR, LARKS

(4) LONGZ: FLATI, LONGZ, RAMMS,

c. RNAV Arrival Gate Fixes: AALLE, LAWGR, NIIX, CLASH, SSKII, TBARR, FLATI, LONGZ.

d. Non-RNAV Arrival Gate Fixes: RAMMS, TOMSN, POWDR, LARKS, DANDD, QUAIL, LANDR, SAYGE.

e. RNAV Departure Gate Fixes:

Denver Center and Denver TRACON

- (1) West Gate: BAYLR, CONNR, COORZ, ZIMMR.
- (2) East Gate: EEONS, EMMYS, EPKEE, EXTAN.
- (3) North Gate: YAMMI, YOKES, RIKKK, BRYCC.
- (4) South Gate: SOLAR, SCAGS, SHOJO, STAKR.
- f. Non-RNAV Departure Gate Fixes:
 - (1) West Gate: ZIMMR, CONNR, BAYLR.
 - (2) East Gate: EEONS, EMMYS, EPKEE, EXTAN.
 - (3) North Gate: YAMMI, YOKES.
 - (4) South Gate: SOLAR.
- g. TRACON Airspace - Airspace delegated to the TRACON is defined in Attachment 1 and depicted in Attachment 2

6. PROCEDURES:

- a. Traffic Management Unit (TMU):
 - (1) TRACON TMU/CIC must keep Center TMU/CIC and other applicable center controllers informed of the KDEN landing configuration, airport acceptance rate, and runway conditions. If conditions allow, it is preferred that the Center have 30 minutes' notice before changing flows.
 - (2) TRACON CIC or applicable DR controller must keep Center TMU/CIC and other applicable center controllers informed of the KAPA landing direction.
- b. Arrivals:
 - (1) All Denver terminal area arrivals must comply with the routes, altitudes, and speeds IAW Attachment 4.
 - (2) Denver Group A arrival aircraft must be established on the RNAV STAR at or before the RNAV Arrival gate fix.
 - (3) Denver Group A Non-RNAV aircraft must be established on the Non-RNAV STAR at or before the Non-RNAV gate fix IAW Attachment 4. Group A Non-RNAV aircraft must be coordinated with TRACON.
 - (a) RNAV and Non-RNAV Denver Group A arrival aircraft must be sequenced together.
 - (4) Denver Group A arrival aircraft must be issued either "descend via" the RNAV STAR with landing direction OR a crossing restriction IAW Attachment 4, with the following exceptions:
 - (a) When a Denver RNAV arrival on a "Descend Via" clearance conflicts with a satellite Group A arrival on the same lateral path in the SSKII arrival gate, Center must issue "descend via (STAR/landing direction) EXCEPT maintain FL190."
 - (b) When a Denver RNAV arrival on a "Descend Via" clearance conflicts with Group B or C aircraft entering TRACON through the LONGZ or SSKII arrival gate, Center must issue "descend via (STAR/landing direction) EXCEPT maintain FL190."
 - (5) Center may, but is not required to, change the landing direction on aircraft within 20 NM of the RNAV gate fix.
 - (6) Control and Separation Responsibilities:

- (a) Center must ensure arrivals of like Aircraft Groups are not less than 5 NM in trail, measured by the succeeding aircraft crossing the TRACON/Center common boundary, regardless of altitude, except as noted in 6.b.(6), (b)(i) and (b)(i).
- (b) TRACON has separation responsibility between all aircraft entering TRACON airspace, regardless of handoff status, when TRACON issues control instructions prior to the TRACON/Center common boundary.
 - (i) TRACON has control for descent and turns up to 45 degrees within 15 NM of the TRACON/Center boundary.
 - (ii) TRACON has control for speed adjustments not slower than 250 knots.
- (c) Center may assign DEN Group A RNAV arrivals a speed between 250 knots and the published RNAV arrival gate fix speed (or 280 knots when there is no published speed at the arrival gate fix), provided the aircraft has a clearance to comply with published speeds at HEDDD/PPINT, HAGGR/EVRLY, BGDEE/MNARK & FLNEL/ELLDO.
- (d) Transfer of communication must be completed prior to the RNAV gate fix for RNAV aircraft, or the common boundary for non-RNAV aircraft.
- (7) APA ZOMBZ STAR arrivals must be issued a “descend via” clearance and landing direction.
- (8) MEDEVAC Group B and C arrivals to KFNL and KGXY may be routed via BARGR..KFNL/KGXY. All other MEDEVAC arrivals must be routed via the appropriate routing in Attachment 4.
- c. Departures:
 - (1) Denver Terminal Area departures must be established on a published SID prior to the Center/TRACON boundary with the following exceptions:
 - (a) TRACON may clear departures up to the RNAV or non-RNAV departure gate fix provided they are established IAW 6.c(1).
 - (b) North gate departures filed over CYS may be cleared direct CYS.
 - (c) North gate departures filed over RAP may be cleared direct RAP.
 - (d) South gate departures filed over PUB may be cleared direct PUB.
 - (e) West gate Group B and C departures filed over RLG may be cleared direct RLG.
 - (2) Aircraft unable to comply with 6.c.(1) must exit TRACON airspace through a departure gate as depicted in Attachment 2.
 - (3) TRACON must ensure 3 NM separation, constantly increasing, provided aircraft are established on or assigned a heading to intercept diverging SIDs/transitions IAW 6.c(1).
 - (4) TRACON must ensure 5 NM separation, constant or increasing, for aircraft cleared on the same course or SID.
 - (5) Group A Terminal Area departures assigned the same departure gate fix/course and altitude, separated by 10 NM or less, must be assigned 280 knots by TRACON and need not be coordinated. All other assigned speeds must be verbally coordinated.

Denver Center and Denver TRACON

- (6) When Center issues a control instruction within TRACON airspace, Center is responsible for separation between that aircraft and all other aircraft that will enter the same Center sector.
 - (a) Center has control for climb on all departures.
 - (b) Center has control for speed increase and turns up to 45 degrees within the departure gate and within 15 NM of the Center/TRACON common boundary.
- (7) Departures must be cleared to FL230 or filed altitude if lower with the following exceptions:
 - (a) Group B and C Aircraft:
 - (i) Group B and C aircraft filed to exit TRACON airspace from Point N clockwise to Point R must be assigned 12,000' MSL or filed altitude if higher.
 - (ii) Aircraft filed to exit TRACON airspace from Point R clockwise to Point D, at or below 9,000' MSL, must be assigned 9,000' MSL.
 - (iii) Group B and C aircraft routed out the East Gate, filed at or above 13,000' MSL, must be assigned 13,000' MSL when there is a conflict with Group A aircraft over the same departure route.
 - (iv) Group B and C aircraft routed out the north, west, and south gates, filed at or above 17,000' MSL, must be assigned an interim altitude of 17,000' MSL or FL190 when there is a conflict with Group A aircraft over the same departure route.
 - (b) TRACON may apply vertical separation between a satellite Group A departure and a KDEN Group A departure filed over the same departure route.
- (8) KLAR Arrivals: Center has control for descent on KLAR arrivals departing the TRACON terminal area at FL230 or below.
- (9) KFMM Arrivals: FMM arrivals are approved direct to the airport at 8,000' MSL. Center has control for descent.
- d. Overflights:
 - (1) Center releases control to TRACON on overflights entering through an arrival gate for 30 degree turns, IAW with Section 6.b.(7).
 - (2) All overflights transiting TRACON airspace must enter through an arrival gate and exit through a departure gate. Center must ensure that overflight aircraft are cleared via one of the following routes:
 - (a) RAMMS..DVV..EEONS.
 - (b) TOMSN..FQF..BRK.
 - (c) LANDR..DVV..ZIMMR.
 - (d) SAYGE..FQF..BRK.
 - (e) DANDD..DVV..CYS.
 - (f) QUAIL..FQF..BAYLR.
 - (g) LARKS..FQF..EPKEE.
 - (h) POWDR..DVV..CYS.
 - (3) KCOS Arrivals:

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- (a) Group A COS arrivals should not transit TRACON airspace
- (b) Group B COS arrivals from the northwest must be routed via TOMSN..FQF.V389.ADANE..BRK..KCOS at FL230 or filed altitude if lower
- (c) Group B COS arrivals from the northeast must be routed via SAYGE..FQF.V389.ADANE at 12,000' MSL.
- (d) Group C COS arrivals entering TRACON airspace from Point R clockwise to Point D must be routed FQF.V389.ADANE..BRK..KCOS at 8,000' MSL or 10,000' MSL.

7. ATTACHMENTS:

- a. Attachment 1 - Airspace Delegated to Denver TRACON
- b. Attachment 2 - Visual Depiction of Denver TRACON Airspace.
- c. Attachment 3 - Holding Procedures.
- d. Attachment 4 - Arrival STAR / Route Chart.

8. APPROVED:

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Attachment 1 - Airspace Delegated to Denver TRACON

At FL230 and below via the Irondale 42 NM arc clockwise from point A through point D, then via direct to point E, then via the Irondale 45 NM arc to point F, then via direct to point G, then via direct to point HH, then via direct to point H, then via the Irondale 42 NM arc clockwise to point K, then via route segments from point K through point S thence to the point of beginning.

A – 40°23'58" N 104°08'40" W	K – 40°29'39" N 105°05'28" W
B – 40°05'58" N 103°51'54" W	L – 40°33'48" N 105°08'41" W
C – 39°30'17" N 103°55'47" W	M – 40°36'58" N 105°15'32" W
D – 39°15'01" N 104°15'51" W	N – 40°43'45" N 105°16'25" W
E – 39°11'48" N 104°15'09" W	O – 40°55'10" N 104°57'56" W
F – 39°06'47" N 104°52'00" W	P – 40°48'00" N 104°48'00" W
G – 39°08'03" N 105°09'21" W	Q – 40°46'30" N 104°32'00" W
HH – 39°08'10" N 105°20'43" W	R – 40°48'00" N 104°27'20" W
H – 39°15'28" N 105°11'42" W	S – 40°26'26" N 104°06'17" W
I – 39°28'34" N 105°28'52" W	thence to point of beginning
J – 40°11'47" N 105°30'51" W	

In addition to the above airspace, the following shelves are delegated to TRACON:

Northeast Shelf: From 13,000' MSL to FL220 via the Irondale 52 NM arc clockwise from point AA to point BB, then via direct to point B, then via the Irondale 42 NM arc counterclockwise to point A, then via direct to point S, then via direct point AA.

AA – 40°32'32" N 104°01'35" W	BB – 40°08'50" N 103°39'04" W
B – 40°05'58" N 103°51'54" W	A – 40°23'58" N 104°08'40" W
S – 40°26'26" N 104°06'17" W	thence to point of beginning

Southeast Shelf: From 13,000' MSL to FL220 via the Irondale 52 NM arc clockwise from point CC to point DD, then via direct to point E, then via direct to point D, then via the Irondale 42 NM arc counterclockwise to point C, then via direct point CC.

CC – 39°26'52" N 103°43'20" W	DD – 39°05'07" N 104°11'53" W
E – 39°11'48" N 104°15'09" W	D – 39°15'01" N 104°15'51" W

Denver Center and Denver TRACON

C – 39°30'17" N 103°55'47" W

thence to point of beginning

Southwest Shelf: From 13,000' MSL to FL220 via the Irondale 52 NM arc clockwise from point HH to point HI, then via direct to point II, then via direct to point I, then via the Irondale 42 NM arc counterclockwise to point H, then via direct to point HH.

HH – 39°08'10" N 105°20'43" W

HI – 39°27'47" N 105°43'17" W

II – 39°28'12" N 105°33'06" W

I – 39°28'34" N 105°28'52" W

H – 39°15'28" N 105°11'42" W

thence to point of beginning

Northwest Shelf: From 13,000' MSL to FL220 via the Irondale 52 NM arc clockwise from point JJ to point M, then via direct to point L, then via direct to point K, then via the Irondale 42 NM arc counterclockwise to point J, then via direct to point JJ.

JJ – 40°11'08" N 105°45'45" W

M – 40°36'58" N 105°15'32" W

L – 40°33'48" N 105°08'41" W

K – 40°29'39" N 105°05'28" W

J – 40°11'47" N 105°30'51" W

thence to point of beginning

Northwest Low Shelf: From the surface up to, but not including, 13,000' MSL via the Irondale 42 NM arc clockwise from point JK to point K, then via direct to point L, then via direct to point M, then via direct point JK.

JK – 40°25'49" N 105°14'07" W

K – 40°29'39" N 105°05'28" W

L – 40°33'48" N 105°08'41" W

M – 40°36'58" N 105°15'32" W

thence to point of beginning

Excluding airspace delegated to Colorado Springs Airport Traffic Control Tower from the surface up to and including 16,000' MSL from point T then via direct to point U then via direct to point V then via the Irondale 45 NM arc to point T.

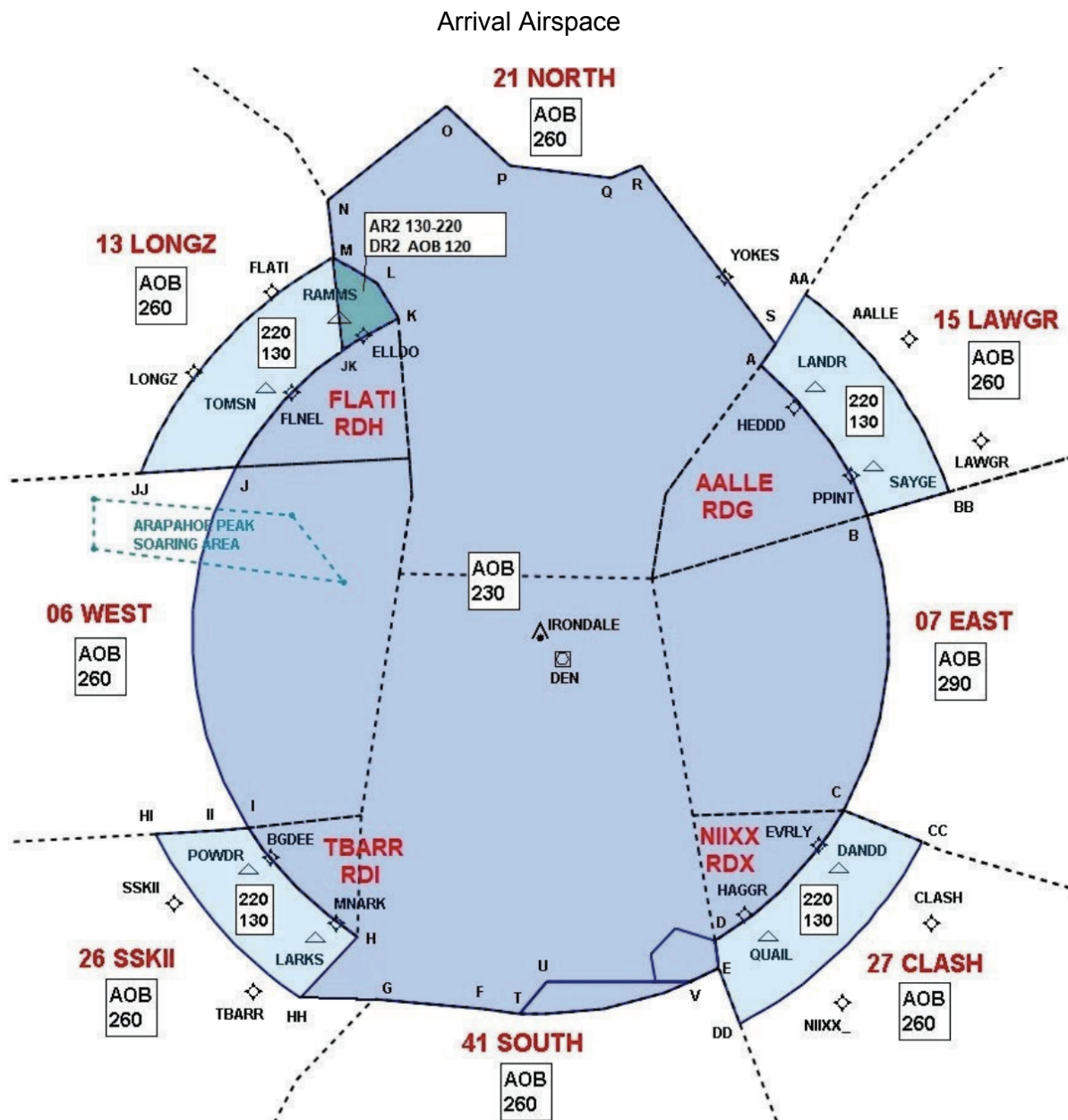
T – 39°06'16" N 104°46'28" W

U – 39°10'06" N 104°42'06" W

V – 39°10'09" N 104°19'43" W

thence to point of beginning

8



Not for real world use.



Attachment 3 - Holding Procedures

When holding is initiated by either facility, the following procedures apply to Group A, RNAV-equipped aircraft at the RNAV fixes listed in 2(d):

1. Initiation of Holding

- a. Arrival sectors that initiate holding must immediately notify the appropriate adjacent arrival sectors and notify TMU.
- b. When TRACON TMU/CIC or Center TMU/CIC initiate holding:
 - (1) All adjacent facility's TMU must be notified.
 - (2) TMU must notify all affected areas/sectors of holding and include the anticipated length of delay.

2. Pre-Arranged Coordination Procedures (P-ACP)

- a. After initial coordination of the requirement to hold, Center may enter TRACON airspace with up to four aircraft in each arrival gate regardless of handoff or point-out status.
- b. Aircraft may be cleared to hold, as published, at BGDEE, MNARK, FLNEL, ELLDO, HEDDD, PPINT, HAGGR, and EVRLY.
- c. Center must assign an altitude to maintain, beginning with FL190 up to and including FL220.
- d. Center must initiate the radar handoff to the appropriate TRACON arrival sector after holding has been assigned.
- e. Center must ensure that holding aircraft are vertically separated prior to transfer of communication.
- f. Center must issue an EFC time, to be determined by adding 30 minutes to the aircraft's holding fix estimate.
- g. TRACON must accept the radar handoff on an aircraft established in hold as soon as practical. If a handoff on an aircraft cannot be accepted within 10 minutes after first crossing the holding fix, TRACON must coordinate with Center.
- h. Communication transfer must take place as soon as practical after acceptance of the handoff by TRACON.
- i. TRACON has control for descent to 13,000 MSL and turns toward the arrival gate on aircraft cleared into or established in holding.

EXCEPTION - TRACON must not descend aircraft below FL190 in AR1 - TBARR without prior approval from Center.

3. Termination of Holding Procedures

- a. Center and TRACON TMU/CIC must coordinate with AAR and/applicable TMI prior to the termination of holding.
- b. TRACON arrival sectors must coordinate with adjacent Center arrival sectors when holding is terminated, along with any applicable TMU restrictions, including miles-in-trail (MIT), landing direction, and route requirements.

Attachment 4 - 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
	B	ALL	RAMMS STAR	16,000	
	C	ALL	BARGR.V4.GILL..KDEN	13,000	
KBJC	A	RNAV	PINNR STAR	Descend Via	
		Non-RNAV	BARGR.V4.GLL..KBJC	15,000	250K or less
	B	ALL	AUTIM..TOMSN..KBJC	14,000	
	C	ALL	BARGR.V4.GLL..KBJC	13,000	
KAPA	A	RNAV	PINNR STAR	Descend Via	
		Non-RNAV	BARGR.V4.GLL..KAPA	15,000	250K or less
	B	ALL	AUTIM..TOMSN..BJC..KAPA	14,000	
	C	ALL	BARGR.V4.GLL..KAPA	13,000	
KBKF	Fighters	ALL	TOMSN STAR	FL230	
	A	ALL	BARGR.V4.GLL..KBKF	15,000	250K or less
	B	ALL	AUTIM..TOMSN..BJC..KBKF	14,000	
	C	ALL	BARGR.V4.GLL..KBKF	11,000	
KGXY KCFO KLMO	A	RNAV	PINNR STAR	Descend Via	
		Non-RNAV	BARGR.V4.GLL..DEST	15,000	250K or less
	B	ALL	BARGR.V4.GLL..DEST	13,000	
	C	ALL	BARGR.V4.GLL..DEST	11,000	
KFNL, All other TRACON Airports	A	ALL	BARGR.V4.GLL..DEST	15,000	250K or less
	B	ALL	BARGR.V4.GLL..DEST	13,000	
	C	ALL	BARGR.V4.GLL..DEST	11,000	

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	10,000	
KBJC	A	RNAV	BRNKO STAR	Descend Via	
		Non-RNAV	YOKES..GLL..KBJC	14,000	250K or less
	B	ALL	Between Points R & S	10,000	
	C	ALL	Between Points R & S	10,000	
KAPA	A	RNAV	BRNKO STAR	Descend Via	
		Non-RNAV	YOKES..GLL..BJC..DEST	14,000	250K or less
	B	ALL	SAYGE..FQF..DEST	10,000	
	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	ALL	SAYGE..FQF..DEST	10,000	
	C	ALL	SAYGE..FQF..DEST	10,000	
KFNL KGXY KLMO	A	RNAV	BRNKO STAR	Descend Via	
		Non-RNAV	YOKES..GLL..DEST	14,000	250K or less
	B	ALL	Between Points R & S	12,000	
	C	ALL	Between Points R & S	10,000	
All other TRACON Airports	A	ALL	GLL..DEST	12,000	250K or less
	B	ALL	GLL..DEST	10,000	
	C	ALL	GLL..DEST	10,000	

CLASH (Southeast) Gate

Airport	Aircraft Group	Nav Type	Route	Altitude	Speed
KDEN	A	RNAV	CLASH STAR	Descend Via	
			NIIXX STAR	Descend Via	
		Non-RNAV	QUAIL STARR	17,000	250K or less
	B	ALL	DANDD STARR	13,000	
	C	ALL	Between Points C & D	10,000	
KBJC	A	RNAV	DUNNN STAR (D01 approval only)	Descend Via	
		Non-RNAV	QUAIL STAR	12,000	250K or less
	B	ALL	QUAIL STAR	11,000	
	C	ALL	Between Points C & D	10,000	
KAPA	A	RNAV	DUNNNN STAR	Descend Via	
		Non-RNAV	QUAIL STAR	12,000	250K or less
	B	ALL	QUAIL STAR	11,000	
	C	ALL	Between Points C & D	10,000	
KBKF	Fighters	ALL	QUAIL STAR	FL230	
	A	ALL	QUAIL STAR	12,000	250k or less
	B	ALL	QUAIL STAR	11,000	
	C	ALL	Between Points C & D	10,000	
KFNL KGXY KCFO	A - KFNL/KGXY	ALL	DANDD STAR	FL230	
	A - KCFO	ALL	DANDD STAR	12,000	250K or less
	B	ALL	DANDD STAR	11,000	
	C	ALL	Between Points C & D	10,000	
All other TRACON Airports	A	ALL	DANDD..DEN..DEST	12,000	250K or less
	B	ALL	DANDD..DEN..DEST	11,000	
	C	ALL	Between Points C & D	10,000	

SSKII (Southwest) Gate

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