Denver ARTCC

ORDER 3120.4F

Effective Date:
21 March, 2025

Subject: Air Traffic Technical Training

This policy establishes and directs the vZDV Training Program and defines the standards, requirements, and individuals in the training program. All training staff and students are required to be familiar with this order and follow each procedure without deviation unless authorized in writing by the vZDV ATM, DATM, or TA.

The procedures prescribed by this order are general and align with VATSIM Global Controller Administration Policy (GCAP) V1.0. Should any procedure in this order be found in violation of the VATSIM GCAP, it shall become void.

Please note, this order is intended for use on the VATSIM network and only applies in a virtual environment simulated on the VATSIM network. It is not applicable for live operations in the National Airspace System.

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Record of Changes

CHANGE	EFFECTIVE DATE	DESCRIPTION
3120.4A	02/23/2022	Initial Release - SL
3120.4B	05/11/2022	Revisions to No-Show Policy and Maximum Bookings - AG
3120.4C	12/01/2023	Full Re-write due to GCAP Release - MB
3120.4D	1/9/2024	Added time limit on booking sessions - MB
3120.4E	2/1/2025	Wording, Training Site, and Written Exam updates - CP
3120.4F	3/21/2025	Update to align with DP002C

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Chapter 1 - Introduction

1.1 Purpose of this Order

This order establishes and directs the vZDV Denver ARTCC Training Program and defines the standards, requirements, and regulations to which all training program participants must adhere. It prescribes vZDV training procedures and policy for use by any individual participating in the training program.

1.2 Audience

This order applies to any/all participants in the vZDV training program, including the Training Administrator, Instructors, Mentors, and students.

1.3 Cancellation

The following Orders/Notices are canceled and superseded; their content has been added to this Order:

A. ZDV3120.4E Training Order, dated 01 February 2025.

1.4 Explanation of Changes

A. See Record of Changes.

1.5 Definitions

As used in this Order:

A. *Must or Shall*, or an action verb in the imperative sense, means mandatory.

B. *Should* means recommended.

C. *May* and *need not* mean optional.

D. *Will* indicates futurity.

1.6 Abbreviations and References

This Order uses abbreviations and refers to words/phrases as defined in the following tables:

TBL 1-1-1

Abbreviations

ABBR / REFERENCE	DESCRIPTION
ATM	Air Traffic Manager
DATM	Deputy Air Traffic Manager
TA	Training Administrator
EC	Events Coordinator
FE	Facility Engineer
INS	Instructor
MTR	Mentor
MIT	Mentor in Training
QA	Quality assurance (program)
IAW	In accordance with
The Program	The training program established in this program
Training Staff	Mentors, Mentors in Training, and Instructors as defined in this order
The Website	www.zdvartcc.org and any/all associated features/programs

Chapter 2 - Training Roles and Responsibilities

2.1 Training Administrator

The Training Administrator's main responsibility is to facilitate the training program by supporting instructors and mentors while maintaining a consistent, structured, and proactive training schedule in accordance with this order.

A. IAW this order (unless otherwise indicated), the TA is responsible for the following:
    a. Recommending training staff appointments to VATUSA and/or the ATM.
    b. Managing training staff.
    c. Conducting briefings with training staff regarding changes to this order and ensuring understanding and adherence to all training policies and materials.
    d. Conducting QA checks on training/mentor sessions.
    e. Monitoring students' progress by periodically reviewing each student's evaluations.
    f. Managing student promotions and certifications.
    g. Developing the training program is the primary objective of the TA. If time allows, the TA should post availability for training sessions, fulfilling the role as an instructor.

2.2 Instructor

The purpose of an instructor is to support and advance the Virtual Air Traffic Simulation Network (VATSIM) training program by developing skilled and knowledgeable virtual air traffic controllers. Instructors ensure that training is delivered effectively, standards are maintained, and students are properly evaluated.

A. Instructors must post at least one availability session per calendar week to facilitate the training program. These sessions should each be a minimum of one hour and may involve live, sweatbox, or classroom training. Instructors must also adhere to the activity requirements outlined in the VATUSA General Training Policy (DP002C).

a. Instructors must complete two (2) training sessions per calendar month to be considered active.
b. Deviations from this policy may be approved on a case-by-case basis by the TA.

B. IAW this order (unless otherwise indicated), the instructor is responsible for the following:
    a. Delivering structured and effective training to students through live, sweatbox, or classroom sessions, focusing on their progression through the VATSIM ratings system.
    b. Managing and updating students' VATUSA training records to accurately reflect student's progress, and completing training evaluations on each training session conducted.
    c. Assessing student readiness and recommending them for practical examinations when they meet the required competencies.
    d. Conducting practical examinations to certify students' readiness for advancement.
    e. Providing instructor recommendations.
C. Procedures for selection, submission, and appointment of instructors are outlined in the VATUSA General Training Policy (DP002C).

2.3 Mentor

The purpose of a mentor is to support the training and development of students by providing individualized guidance and practice opportunities. Mentors work closely with students to reinforce their understanding of air traffic control procedures, policies, and skills, helping them progress through the VATSIM training program and achieve their next rating.

A. Mentors must post at least one availability session per calendar week to facilitate the training program. These sessions should each be a minimum of one hour and may involve live, sweatbox, or classroom training. Mentors must also adhere to the activity requirements outlined in the VATUSA General Training Policy (DP002C).
    a. Mentors must complete two (2) training sessions per calendar month to be considered active.
    b. Deviations from this policy may be approved on a case-by-case basis by the TA.

B. The difference between the instructor and mentor is primarily the method of training involved. Mentors have fewer administrative responsibilities than instructors, allowing them to focus on providing training sessions.

C. IAW this order (unless otherwise indicated), the Mentor is responsible for the following:
    a. Training/mentoring students.
    b. Completing training evaluations on each training session conducted.
    c. Recommending students for Rating Examination to instructors.

D. Conducting training at MTRs current rating:
    a. MTRs must not provide training at their current rating (e.g. S2 MTR providing S2 training).
        i. This may be overridden by an instructor's recommendation or after 60 days have passed since their promotion to the current rating, provided the Training Administrator approves.

E. Requirements of appointment to MTR:
    a. Must hold the rating of S2 for no less than 60 days.
    b. Must have no significant history of disciplinary action within vZDV, VATUSA, or VATSIM.
    c. Must be willing and able to dedicate time to the training department and its students.
    d. Must be able to meet activity requirements specified in 2.3.A of this document.
    e. Must have strong knowledge of the 7110.65 and vZDV policies and procedures.

F. Hiring process:
    a. Candidate must apply by email to the vZDV TA (ta@zdvartcc.org).
    b. Email must include a brief description of their interest in the position.
        i. A resume should be attached.
        ii. The TA will contact the applicant to schedule an interview if the TA elects to move forward with the hiring process.

2.4 Student

The primary role of the student is to participate in the training program by ensuring he/she devotes time to study and sign up for training sessions.

A. Students must attend scheduled training sessions punctually and cancel any session they are unable to attend at least four (4) hours in advance. Cancellations made less than four (4) hours before the session will be treated as no-shows, in accordance with section 3.6 of this policy.
B. Students are expected to be in a Discord voice channel, preferably “Clearance On Request”, at the scheduled time of training.
C. Students are expected to arrive at each session adequately prepared, having completed any assignments assigned by the instructor/mentor.
D. Soliciting training via various forms of media other than the approved media is prohibited and will be reported to and logged by the TA.

2.5 Training Notes

A. Training notes shall be submitted by the instructional staff member within twenty-four (24) hours of completion of the session.
B. Training notes shall consist of at least the following:
    a. Session start and duration.
    b. Session material covered.
    c. Student strengths/weaknesses.
    d. Recommendations for the student.
    e. Any applicable references to ZDV/VATUSA/VATSIM/FAA material deemed necessary.
    f. Training notes shall be stored in a shared location defined by the ATM.
    g. Training notes shall be distributed to the student upon completion. This is automatic.
C. After each Rating Examination, the proctoring instructor must fill out the appropriate grading rubric for the rating attempted. Each evaluation form will be completed to the

VATUSA site, and submitted upon completion of the Rating Examination, to be accompanied by a training note for the session as well. These requirements are also outlined in the VATUSA USADP-002(Series).

2.6 Training Staff Code of Conduct

All Training Staff members must always conduct themselves with courtesy and respect, upholding the principles of professionalism and mutual respect within ZDV. All members are entitled to participate in VATSIM in an environment free from harassment, bullying, and discrimination, as outlined in the VATSIM Code of Conduct. The Training Department strictly prohibits any form of harassment, including but not limited to unwelcome remarks, the sharing of offensive or derogatory content through any medium, and inappropriate jokes, comments, or threats.

2.7 Training Department Disciplinary Action

It will be the sole responsibility of the TA or ATM to determine if a member of the training department violates the items contained within the vZDV Facility Policy (7210.1).

A. First Offense: Training Department members will receive an official written warning from the TA.
B. Second Offense: Meeting with TA and ATM to discuss action plan and/or removal from the training staff.

Chapter 3 - Training

3.1 Position Tier Designations

In VATSIM's Global Controller Administration Policy (GCAP), Tier 1 and Tier 2 positions refer to the categorization of air traffic control roles based on their complexity and airspace significance. The GCAP tiers help standardize training, certification, and competency requirements across the VATSIM network, ensuring safe and realistic operations.

A. Tier 1 Positions (VATSIM GCAP Section 5.4).
    a. DEN ATCT
    b. D01 TRACON (excluding Junction and Pueblo sectors)
B. Tier 2 Positions (VATSIM GCAP Section 5.5):
    a. Aspen TRACAB (Complex Procedure)
    b. D01 TRACON - Junction Sector (Complex Terrain)
    c. ZDV ARTCC (Enroute)
C. Unrestricted Positions (VATSIM GCAP Section 5.3):
    a. All positions not specified above are unrestricted and require no additional endorsements to control.

3.2 Transferring/Visiting Controllers

Upon transfer into vZDV, or acceptance of a visiting application, controllers within VATUSA will be granted their appropriate unrestricted certifications, but must request training for Tier 1 or Tier 2 positions.

A. Out-of-division transfers or visitors to vZDV will be required to complete the VATUSA Rating Competency Exam prior to being accepted into vZDV. VATUSA will assign this exam and post the controller’s score into the controller’s VATUSA action log. Once accepted, the visiting/transferring controller will be assigned their unrestricted certifications and will be able to start training for Tier 1 and 2 certifications.
B. Intra-division transfers or visitors to vZDV are not required to complete the Rating Competency Exam. Once their transfer/visiting request is accepted, they are able to work any unrestricted position or receive training for any vZDV Tier 1 or 2 position.

C. Visiting controllers must be checked out on positions that require a Tier 1 or 2 Endorsement.

3.3 Sessions

A. The primary method for scheduling training shall be through the scheduling tool available via the vZDV website.
    a. Students may only have two (2) sessions booked at any one time.
        i. Impromptu sessions do not count towards this.
    b. Students may only have one (1) session for a calendar day. Students may not have an impromptu session on the same day as a booked session.
B. Impromptu training is also permitted as a way to solicit ad-hoc training.
    a. Students participating in impromptu training must be prepared and remain in a Discord voice channel during their availability window for an immediate start. Availability may be no longer than five hours. Students are expected to be readily available for training throughout their posted availability. Students shall not post availability that contains a start time in the future.
    b. Training staff wishing to conduct impromptu training shall, at a minimum, post their availability and position available to train in the #impromptu-training channel of the vZDV discord.
C. Students should not request training via Discord private messages, voice chat, or any other media, except for posting in impromptu training. Any instance of this occurring shall be reported by the Mentor or Instructor to the TA.
D. In the event of continuous training availability issues, an email shall be sent to the TA at ta@zdvartcc.org for resolution.

3.4 Cancellation

A. Students (as well as training staff) must make every attempt possible to attend sessions for which they signed up.
B. In the event that a session must be canceled by the student or training staff, either party must submit cancellations at least four (4) hours prior to the session. Students, Mentors,

and Instructors must cancel via the Training Scheduling (Scheddy) tool on the ZDV website. A private message to the student/mentor/instructor is also encouraged.

C. Students who cancel within four (4) hours of the scheduled session will be considered a no-show. It is requested that cancellations occur as early as possible once either party is aware they will be unable to attend.

3.5 No-Show Policy

Due to the high demand for training and the limited availability of instructors and mentors, absences are not tolerated at the Denver ARTCC. A no-show prevents valuable time from being allocated to other students and is unacceptable.

A. vZDV Instructors and Mentors will be required to show up to all their training sessions that are not canceled, barring an emergency situation.
B. In the event the Training Staff member does not show up to their session, the student should notify the TA via email at ta@zdvartcc.org, to include, at a minimum, the date/time of session, type of session, and training staff member name.
C. Students are responsible for showing up to their training sessions on time and fully prepared.
    a. Instructors and Mentors will wait for a period of no later than five (5) minutes.
    b. After five (5) minutes, the student shall be considered a no-show and disciplined IAW the following 3 strike system:
        i. Upon the first no-show, the student shall be warned though the training notes left for the training session.
        ii. Upon the second no-show, the student shall be warned via email by the TA and reminded of the consequences of a third no-show.
        iii. Upon a third no-show and any thereafter, the TA may place a hold on the student’s account for up to 14 days, starting from the missed session’s end time. During the hold, the student cannot book training sessions. The TA will notify the student of the hold and its duration via email.
D. No-shows will be removed from a student's record 6 months after each occurrence.

3.6 Exams

A. Exams for each competency level (S1, S2, S3, C1) must be completed through the VATUSA Academy. The VATUSA Academy serves as the designated platform for written exam testing. Written exams can be assigned by emailing ta@zdvartcc.org.

3.7 Preparation

Students are required to have any instructor- or mentor-assigned homework completed prior to their next session. Failure to do so may result in session cancellation and a delay in student progression. If an instructor or mentor finds a student unprepared for the session, they reserve the right to terminate the session immediately and notify the TA of the occurrence.

A. Instances may result in delay of training progression and/or disciplinary action.

3.8 Live Monitoring

Training sessions utilizing the live network to train students are subject to the following procedures:

A. The student must be the primary focus of the training staff. Opening another position will divide their attention away from the student. This may cause the instructor/mentor to miss and correct errors, as well as provide valuable learning opportunities.
    a. Training staff conducting the session may not open another control position while the student is operating on position.
        i. If an underlying or overlying controller is needed, training staff should solicit such requests through the appropriate channel in the vZDV Discord.
B. Training staff logging on with appropriate callsign when monitoring students.
    a. Mentors and Instructors must utilize the Instructor role when observing students on the live network to be able to assist on frequency if the need arises.

Chapter 4 - Career Progression

4.1 Approval

Promotions to ratings S1-C1 are governed by VATSIM Global Controller Administration Policy and the VATUSA General Training Policy (DP002).

4.2 Scope

Promotions are only processed for controllers assigned to the Denver ARTCC. vZDV is not responsible (nor authorized) to process rating promotions of visiting controllers IAW VATSIM policy.

4.3 Requirements

All rating promotions are subject the following requirements:

A. **S1 – Ground Controller**: A student shall be promoted to Student 1 (S1) after they demonstrate proper competence in working unrestricted clearance and ground operations. Promotion to S1 allows a student to perform as a Ground Controller at any facility in vZDV not designated Tier 1 or Tier 2.

   i. Complete training session(s) outlined in the ZDV Training Syllabus.

   ii. Must pass VATUSA Academy - Basic ATC/S1 Written Exam

   iii. This rating may be awarded by a Mentor with the rating of S3 or higher, or by an instructor.

B. **S1 - Tier 2 ASE - Complex Procedure**

   a. Must have an S1 rating.

   b. Complete training session(s) outlined in the ZDV Training Syllabus.

C. **S1 – Tier 1 Denver Ground Controller**: Promotion to a Tier 1 certified S1 controller allows a student to perform as a Ground Controller at any facility in vZDV including the designated Tier 1.

   a. Must have an S1 rating.

   b. Complete training session(s) outlined in the ZDV Training Syllabus.

D. **S2 – Tower Controller**: Promotion to S2 allows a student to perform as a Tower/Local Controller at any facility in vZDV not designated as Tier 1 or Tier 2.
    a. Must have an S1 rating.
    b. Must pass VATUSA Academy – S2 Rating (TWR) Controller Written Exam.
    c. Complete training session(s) outlined in the ZDV Training Syllabus.
    d. Must pass a Local Control Rating Examination.

E. **S2 - Tier 2 ASE - Complex Procedure**
    a. Must have an S2 rating.
    b. Must have Tier 2 ASE Ground Certification
    c. Complete training session(s) outlined in the ZDV Training Syllabus.

F. **S2 – Denver Tower Controller**: Promotion to a Tier 1 certified S2 controller allows a student to perform as a Tower Controller at any facility in vZDV including the designated Tier 1.
    a. Must have an S2 rating.
    b. Must have Tier 1 Denver Ground Certification
    c. Must pass sweatbox outlined in the ZDV Training Syllabus IAW S2 competencies at a normal traffic level.

G. **S3 – Approach Controller**: Promotion to S3 allows a student to perform as an Approach/Departure Controller at any facility in vZDV not designated Tier 1 or Tier 2.
    a. Must have an S2 rating.
    b. Must pass VATUSA Academy – S3 Rating Controller Written Exam.
    c. Complete training session(s) outlined in the ZDV Training Syllabus.
    d. Must pass a S3 Controller Rating Examination.

H. **S3- Tier 2 ASE - Complex Procedure**
    a. Must have an S3 rating.
    b. Must have Tier 2 ASE Tower Certification
    c. Complete training session(s) outlined in the ZDV Training Syllabus.

I. **S3 – Tier 2 Complex Terrain**
    a. Must have an S3 rating.

b. Complete training session(s) outlined in the ZDV Training Syllabus.

J. **S3 – D01 Controller**: Promotion to a Tier 1 certified S3 controller allows a student to perform as an Approach Controller at any facility in vZDV including the designated Tier 1 positions.

a. Must have an S3 rating.

b. Must have Tier 1 Denver Tower Certification

c. Complete training session(s) outlined in the ZDV Training Syllabus.

K. **C1 – Center Controller**: Promotion to C1 allows a controller to perform as an Enroute/Center Controller at vZDV.

a. Must have an S3 rating.

b. Must pass VATUSA Academy – C1 Rating Written Exam.

c. Must have all Tier 2 and Tier 1 Certifications within ZDV.

d. Must complete training session(s) outlined in the ZDV Training Syllabus.

e. Must pass a Center Controller Rating Examination.

L. Tier 1 or 2 Certification Revocation

a. Tier 1 or 2 certifications may be revoked if:

i. The member fails to meet activity requirements outlined in the vZDV Facility Policy (7210.1).

ii. The member is deemed to be not competent for the outlined duties of the rating.

1. Any issue with a controller performing below standard shall be handled IAW the Global Controller Administration Policy, Section 9.5.

4.4 Solo Certification

All information regarding the approval for, and operations under, a solo certification is prescribed in this section. The goal of the solo certificate is to allow students to practice their skills in a live network environment. Solo certifications must be assigned by a mentor or instructor.

A. **VATUSA Level Solo Certification**

a. VATUSA level solo certifications allow a student to work a position for which they do not possess the required rating. These solo certifications are initially granted for 30 days and may be extended up to a maximum of 90 days with approval from an instructor or the Training Administrator.

B. **S2 on Approach/Departure**

a. Must pass the VATUSA Academy – S3 Rating Controller Written Exam.
b. Must have completed all classroom training.
c. Complete training session(s) outlined in the ZDV Training Syllabus.
d. Must have an Instructor Recommendation for solo certification.
    i. Solo certification must be published on the VATUSA website.

C. **S3 on Denver Center**

a. Complete sweatbox session(s) outlined in the ZDV Training Syllabus.
b. Must have an Instructor recommendation for solo certification.
    i. Solo Certification must be published on VATUSA website.
c. Must complete a minimum of ten hours of live network monitored training.
d. Must pass ZDV Enroute Radar Written Exam with a score of 80% or higher.
e. Must pass the VATUSA Academy – C1 Rating (CTR) Center Controller Exam.

D. **Denver Tier 1 Solo Certification**

a. Instructors and mentors may authorize a solo certification for any Tier 1 position, which allows a student to operate the specified Tier 1 position during normal non-event level traffic. These solo certifications are initially granted for 30 days and may be extended up to a maximum of 90 days with approval from an instructor or the Training Administrator. These students will not be able to sign up for events or work event level traffic until a full certification is granted. Exceptions may be granted on a case-by-case basis with concurrence of the EC and TA.
b. Definitions of Denver Tier 1 Solo Certifications
    i. DEN GND
    ii. DEN TWR
    iii. D01

iv. ZDV

4.5 Solo Certification Revocation

Solo certifications may be revoked if a member is deemed incompetent to perform the duties required by their rating or if they are no longer qualified to hold the certification. Other reasons for revocation include, but are not limited to:

A. Disciplinary actions taken against the member, such as removal from vZDV, vZDV's Discord, or suspension from the VATSIM network.
B. Harassment of any member within the VATSIM network.
C. At the discretion of the ATM, DATM, or TA.

A recommendation for revocation must be submitted by an instructor to the TA via email, including detailed documentation supporting the revocation. This email must also be CC’d to the ATM and DATM. After reviewing the situation, the TA, ATM, or DATM will determine the best course of action, which may include revocation of solo certification.