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

Table of Contents

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 What This Order Cancels

The following Orders/Notices are canceled and superseded; their content has been added to this Order:

    a. ZDV3120.4B Training Order, dated August 5, 2022.

1.4 Explanation of Changes

    a. See changes table.

1.5 Mission

    a. It is the mission of the Denver ARTCC to provide safe and efficient air traffic services to simulated air traffic on the VATSIM network.

    b. The Facility will strive to maintain a professional, friendly, supportive, and educational environment for both network controllers and pilots.

1.6 Word Meanings

As used in this Order:

    a. *Must*, 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.

1.7 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
QA	Quality assurance (program)
IAW	In accordance with
The Program	The training program established in this program
Training Staff	Mentors, and Instructors as defined in this order
Solo Cert	Solo Certification
The Website	www.zdvartcc.org and any/all associated features/programs

Chapter 2 - Administration

Training Roles and Responsibilities

2.1 Training Administrator

The primary role of the Training Administrator is to **enable the training program** by assisting instructors, mentors, and instructor assistants and ensuring a constant, steady, and aggressive training schedule in adherence to (and enforcement of) this order.

a. IAW this order (unless otherwise indicated), the TA is responsible for the following:

1. Recommending training staff appointments to VATUSA and/or the ATM.

2. Managing training staff.

3. Conducting briefings with training staff regarding changes to this order and ensuring understanding and adherence to all training policy and material.

4. Conducting QA checks on training/mentor sessions.

5. Monitoring students' progress by periodically reviewing each student's evaluations.

6. Conducting monthly record reviews on all members.

7. Managing student promotions and certifications.

8. 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.

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2.2 Instructor

The primary role of the instructor is to **execute the training program** by ensuring his/her availability for a minimum of one hour per calendar week to train students via either live, sweatbox, or classroom training.

a. The one-hour per week requirement pertains to posted availability. Instructors must still follow the activity requirements in the VATUSA USADP-002(Series). In addition, Instructors must complete 2 (two) session per calendar month to remain active.

   1. Deviations from this policy will 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:

   1. Training/instructing students.

   2. Managing and updating students' VATUSA training records to accurately reflect student's progress, and completing training evaluations on each training session conducted.

   3. Recommending practical exams.

   4. Conducting QA checks on training/mentor sessions.

   5. Conducting OTS examinations and certifying student competency.

   6. Providing instructor recommendations.

c. Procedures for selection, submission, and appointment of instructors are outlined in VATUSA USADP-002(Series)

2.3 Mentor

The primary role of the Mentor is to **augment the training program** by ensuring his/her availability for a minimum of one hour per calendar week to train students via either live, sweatbox, or classroom training in the subject area at or below their current rating.

a. The one-hour per week requirement pertains to posted availability. Mentors MUST complete two (2) training sessions per calendar month to be considered active.

   1. Deviations from this policy will 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:

   1. Training/mentoring students.

   2. Completing training evaluations on each training session conducted.

   3. Recommending students for OTS examinations to instructors.

d. Conducting training at MTRs current rating:

   1. MTRs must not provide training at their current rating (e.g. S2 MTR providing S2 training)

      i. This can be overridden by an instructor recommendation or following a period of 60 days since promotion to their current rating.

e. Requirements of appointment to MTR:

   1. Must hold the rating of S2 for no less than 60 days.

   2. Must have no significant history of disciplinary action within vZDV, VATUSA, or VATSIM.

   3. Must be willing and able to dedicate time to the training department and its students.

   4. Must be able to meet activity requirements specified in 2.3.a of this document.

   5. Must have strong knowledge of the 7110.65 and vZDV policies and procedures.

f. Hiring process:

   1. Candidate must apply by email to the vZDV TA ta@zdvartcc.org

   2. Email must include a brief description of their interest in the position.

      a. A resume should be attached.

      b. 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. Soliciting training via various forms of media other than the approved media is prohibited and will be reported to and logged by the TA.

  b. Students are responsible for attending scheduled training sessions **on time** and canceling prior to **four (4) hours** from the session. Sessions canceled within four (4) hours will be considered no shows IAW section 3-3-4 of this policy.

  c. Students are expected to arrive at each session adequately prepared, having completed any assignments made by the instructor/mentor.

2.5 Training Notes

  1. Training notes shall be completed (and are required) by the instructional staff member within twenty-four (24) hours of completion of the session.

  2. 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.

  3. After each OTS session the instructor must fill out the appropriate grading rubric appropriate for the rating attempted. Each evaluation form will be completed on the VATUSA site, and submitted upon completion of the OTS, 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 shall, at all times, be courteous and respectful to one another. All training staff are expected to treat each other and all members of ZDV with respect and dignity. All members are entitled to enjoy VATSIM in an environment that is free of harassment, bullying and discrimination. The Training Department will not tolerate harassment, bullying and discrimination, including but not limited to: unwelcome remarks, the display or circulation of offensive, derogatory or sexually explicit pictures or other materials, including by email or any other form of electronic media, offensive or derogatory jokes, comments (explicit or by innuendo) and verbal 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 7210.1(Series)

  i.   First Offense: Training Department members will receive an official written warning from the TA.

  ii. Second Offense: Meeting with TA and ATM to discuss action plan and/or removal from the training staff.

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3.1 Position Tier Designations

a. Per VATSIM GCAP Section 5.4, **KDEN and the D01 TRACON (Excluding the Junction and Pueblo sectors)** are designated as Tier 1 Positions in ZDV**.**

b. Per VATSIM GCAP Section 5.5, **Aspen TRACAB** is designated as a Tier 2 (Complex Procedure) Position in ZDV**.**

c. Per VATSIM GCAP Section 5.5, **Eagle County FCT** is designated as a Tier 2 (Complex Terrain) Position in ZDV**.**

d. Per VATSIM GCAP Section 5.5, **D01, Junction Radar** is designated as a Tier 2 (Complex Terrain) Position in ZDV

e. Per VATSIM GCAP Section 5.5, **ZDV Enroute** is designated as a Tier 2 (Enroute) Position in ZDV.

f. Per VATSIM GCAP Section 5.3, all other positions not listed above will be designated unrestricted, and not require any additional endorsements to control.

3.2 Initial Rating

a. A student shall be promoted to Tower Trainee (S1) after they demonstrate proper competence in working minor clearance and ground operations.

   i. A Mentor or Instructor may give this rating.

b. The rating shall only be endorsed after the student has been deemed competent by a member of the vZDV Training Staff.

c. There shall be no OTS, or written examination required to earn the S1 rating, per the GCAP.

3.3 Transferring/Visiting Controllers

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

1. Outside of division transfers or visitors to vZDV will be required to complete the VATUSA Rating Competency Exam, prior to being accepted into ZDV. VATUSA will assign this exam, and post the controllers score into the controllers VATUSA action log. Once accepted, the visiting/transferring controller will be assigned their unrestricted certifications, and able to start training for Tier 1 and 2 certifications.

2. 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.

    a. Visitors

        1. Visiting controllers must be checked out on positions that require a Tier 1 or 2 Endorsement. This checkout also includes passing the associated written exam(s) with a score of 80% or higher.

        2. These checkouts may be completed by the following members of the training staff:

            i. Instructor(s)

            ii. Mentor(s)

3.4 Sessions

1. Training sessions shall primarily be scheduled through the vZDV website on Picktime.

    a. Students may only have **TWO (2)** sessions booked at any one time.

    b. Students may only have **ONE (1)** session booked for a calendar day.

    c. Impromptu sessions do not count towards this.

2. Secondarily, impromptu training is also permitted. Members of training staff wishing to conduct impromptu training shall at minimum post their availability and position available to train in the #impromptu-training channel of the vZDV discord.

3. Students should never request training through Discord private message or other media forms. In the event of continuous training availability issues an email shall be sent to the TA at ta@zdvartcc.org for resolution.

3.5 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 who cancel within four (4) hours of the scheduled session will be considered a no-show unless a valid reason has been received by the training staff member conducting the session. It is requested that you cancel the session as early as possible once either party is aware they will be unable to attend.

3.6 Tardiness

a. Due to the large amount of preparation and material to be covered in each training session, **it is important for students and training staff to show up on time**. Students who do not show within 5 minutes of the start time will be considered absent and the session will be terminated at the discretion of the instructor, mentor, or instructor assistant conducting the session. (See 3.7)

b. Training staff who are continuously tardy will be subject to administrative actions which may include written/verbal warning or removal from training staff.

c. To avoid tardiness, students are encouraged to be present on Discord ten minutes prior to their scheduled training session time.

3.7 No Show Policy

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 case the Training Staff member does not show up to their session, the student should provide a written statement to the TA, 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.

  i.   Instructors and Mentors will wait for the period of no later than five (5) minutes

  ii. After five (5) minutes, the tardy shall be counted as a no show.

  iii. In the event the Student does not show up for their session, disciplinary action will follow a 3 strike system:

    1. Upon the first no show, the student shall be warned though the training notes left for the training session.

    2. Upon the second no show, the student shall be warned via email by the TA and reminded of the actions upon the third no show.

    3. Upon the third no show, and to any subsequent no shows, at the discretion of the TA, a hold shall be placed on the students account, during which the student will not be allowed to book any training sessions regardless of date. This hold shall be in place for no more than 14 days starting from the end time of the training session that the students did not attend. The student shall be notified of all holds and their end time via email from the TA.

Because of the high demand for training and the limited number of instructors, mentors, and instructor assistants, absences are not tolerated at the Denver ARTCC. A no show takes up time that could have been spent with another student, and is not acceptable.

3.8 Exams

a. **Written exams** should be completed before the end of rating or Tier 1/2 practical training, and *shall* not be required to begin training at any level. The VATUSA Academy is the written exam testing location. Written exams may be assigned by emailing ta@zdvartcc.org.

    1.   List of written exams:

        i.   Minor Ground Written

        ii.   Denver Ground Written

        iii.   Minor Tower Written

        iv.   Denver Tower Written

        v.   ZDV Terminal Radar Written

        vi.   D01 Terminal Written

        vii.   ZDV Enroute Radar Written

b. **Practical Exams** are assigned at the request of the recommending instructor or mentor. Practical exams are the over-the-shoulder (OTS) portion of the certification process, where the student is strictly monitored for compliance with FAA orders, VATSIM competencies, and vZDV facility-specific procedures. In the interest of QA, practical exams must not be administered by the instructor or mentor requesting the exam. If the student fails a practical exam twice, the student may only conduct a third practical exam after receiving an authorization to test from the Training Administrator. After the completion of a rating change practical examination, the instructor who completed the exam is required to submit an OTS Rubric form to the VATUSA site.

    1. Exams resulting in a rating change must be conducted by an instructor.

    2. Practical exams involving issuing a Tier 1 or 2 endorsement may be conducted by an instructor or mentor.

3.9 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.

3.10 Live Monitoring

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

a. Students must ensure they are logging on the position using the appropriate SOP callsign and frequencies.

    i. Ensure the facility type is set to match the position.

b. The student must be the primary focus of the training staff. Opening another position will divide the attention away from the student. This may cause the instructor/mentor to miss and correct errors, as well as provide valuable learning opportunities.

    i. 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.

c. Training staff logging on with appropriate callsign when monitoring students.

    i. 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

Certification and Promotion

4.1 Approval

Promotions to ratings S1-C1 are governed by VATSIM *Global Controller Administration Policy,* and VATUSA USADP-002(Series)

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:

1. **S1 – Ground Controller**: 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.   Must complete CYSCD1, APACD2, APAGC1, APACD1, and COSGC1 sweatbox sessions.

    ii. Complete Minor Ground written exam with a score of 80% or higher.

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

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

    i.   Must hold valid S1 rating

    ii. Complete ASE Classroom session

    iii. Complete ASEGC1 Sweatbox session.

3. **S1 - Tier 2 Complex Terrain**

    i.   Must hold valid S1 rating

    ii. Complete EGE Classroom Session

    iii. Complete EGEGC1 sweatbox Session

4. **S1 – 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**.

    i.   Must hold a valid S1 rating.

ii.   Must hold all S1 Tier 2 certifications.

iii.   Must pass DENGC1 Sweatbox session IAW S1 competencies at a normal

traffic level.

iv.   Must pass the Denver Ground Written exam with a score of 80% or

higher.

5.   **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.**

i.   Must hold a valid S1 rating

ii.   Must complete BJCLC1, APALC1, APALC2, APACL3, and COSLC1 sweatbox

sessions.

iii.   Must pass Minor Tower Written Exam with a score of 80% or higher.

iv.   Must pass VATUSA Academy – S2 Rating (TWR) Controller Written Exam

v.   Must pass a Local Control Practical (OTS) Exam.

6.   **S2 - Tier 2 Complex Procedure**

i.   Must hold valid S2 rating

ii.   Complete ASE Classroom training

iii.   Complete ASELC1 Sweatbox session.

7.   **S2 - Tier 2 Complex Terrain**

i.   Must hold valid S2 rating

ii.   Must complete EGE Classroom training

iii.   Complete EGELC1 Sweatbox session

8.   **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**.

i.   Must hold a valid S2 rating

ii.   Must hold all S2 Tier 2 certifications.

iii.   Must pass DENLC1 sweatbox IAW S2 competencies at a normal traffic level.

iv.   Must pass Denver Tower written exam with a score of 80% or higher.

9.   **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.**

     i.   Must hold a valid S2 rating.

     ii.   Must complete CPRTC1, CPRTC2, CPRTC3, CPRTC4, PUBTC1, PUBTC2, and PUBTC3 sweatboxes

     iii.   Must pass vZDV Radar Written exam with a score of 80% or higher.

     iv.   Must pass VATUSA Academy – S3 Rating Controller Written Exam.

     vi.   Must pass a S3 Controller Practical Exam (OTS) exam with a score of 80% or higher.

10.   S3- Tier 2 Complex Procedure
     i.   Must hold a valid S3 rating
     ii.   Must Complete ASE classroom Training
     iii.   Must complete ASETC1 sweatbox.

11.   S3 – Tier 2 Complex Terrain
     i.   Must hold a valid S3 rating.

     ii.   Complete Grand Junction (GJT) classroom training

     iii.   Complete GJTTC1 sweatbox.

12.   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.**

     i.   Must have valid S3 rating

     ii.   Must hold all S3 Tier 2 certifications.

     iii.   Must pass D01 DR/SR Combo, D01 AR-N, D01 AR-S, and D01 FR files IAW all S3 competencies at a normal traffic level.

     iv.   Must pass D01 written exam with a score of 80% or higher.

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

     i.   Must hold a valid S3 rating.

     ii.   Must complete ZDV Area 1, 2, 4 and South sweatbox sessions.

     iii.   Must complete a minimum of ten hours of live network monitored training.

     iv.   Must pass Denver Center Written Exam with a score of 80% or higher.

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

     vi.   Must pass a Center Controller Practical Exam (OTS).

4.4 Tier 1 or 2 Certification Revocation

    A. Tier 1 or 2 certifications may be revoked if:
        1. Fails to meet activity requirements outlined in the ZDV 7210.10(Series)
        2. The member is deemed to be not competent for the outlined duties of the rating
            a. Any issue with a controller performing below standard shall be handled IAW the Global Rating Administration Policy, Section 9.5.

4.5 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**

VATUSA level solo certifications allow a student to work a position for which they do not possess the required rating. These solo certifications are granted for no more than thirty days, to a maximum of 90 days, after obtaining approval from an instructor or the Training Administrator. To be eligible for a VATUSA solo certificate the student must have completed the following:

1. **S2 Minor Approach**

    i.   Must have completed all classroom training

    ii.   Must complete CPRTC1, CPRTC2, CPRTC3, CPRTC4, PUBTC1, PUBTC2, and PUBTC3 sweatbox files.

    iii.   Must have Instructor Recommendation for solo certification.

        a. Solo certification must be published on VATSUA website.

    iv.   Must pass vZDV Radar Written exam with a score of 80% or higher.

    v.   Must pass VATUSA Academy – S3 Rating Controller Written Exam.

2. **S3 on Denver Center**

    i.   Must hold all Tier 1 and Tier 2 S3 endorsements in vZDV.

    ii.   Must complete ZDV area 1, 2,4 and South sweatbox files.

    iii.   Must have Instructor recommendation for solo certification.

        a. Solo Certification must be published on VATUSA website.

    iv.   Must complete a minimum of ten hours of live network monitored training.

    v.   Must pass ZDV Enroute Radar Written Exam with a score of 80% or higher.

    vi.   Must pass the VATUSA Academy – C1 Rating (CTR) Center Controller Exam.

b. Denver Tier 1 Solo Certification

1. Instructors and mentors may authorize a Denver level solo certification for any Tier 1 position allowing a student to operate the specified Tier 1 position during normal non-event level traffic. These solo certifications are granted for no more than thirty days, to a maximum of 90 days, after obtaining approval from 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.

   a. Definitions of Denver Tier 1 Solo Certifications

      1. DEN GND
      2. DEN TWR
      3. D01
      4. ZDV

4.6 Solo Certification Revocation

Solo certificates will be revoked if the member is deemed to be not competent for the outlined duties of the rating, or is no longer qualified to hold the certificate. Other potential reasons for removal of a solo certificate include but are not limited to:

1. Any time disciplinary action is taken against the member, whether by means of removal from vZDV, vZDV's discord, or suspension from the VATSIM network.
2. Harassment of any member of the VATSIM network.
3. At ATM, DATM, or TA discretion.

   a. Revocation Process

      1. Recommendation for revocation must be submitted by an instructor to the TA via email with detailed documentation of reasoning for revocation. This email must be CC'd to the ATM and DATM.
      2. The TA, ATM, or DATM will investigate the situation and take appropriate action. This process will result in one of three possible outcomes:

      i.   Revocation of solo certificate. Remedial training plan will be created.
      ii. Revocation of solo certificate, solo certificate issued. Remedial training plan will be created.
      iii. Retention of solo certificate, with notification of remedial training needs and potential certificate revocation.

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