

VIRTUAL ATLANTA ARTCC 3120.4G FACILITY TRAINING POLICY



VIRTUAL AIR TRAFFIC SIMULATION NETWORK VATUSA DIVISION ATLANTA ARTCC

SUBJ: Atlanta ARTCC Facility Training Policy

This order prescribes direction and guidance for the training of personnel under the jurisdiction of the Atlanta ARTCC. All personnel shall familiarize themselves with the provisions about their responsibilities. When a situation arises that is not adequately covered by this order, exercise good judgment in resolving the situation. This document is only to be used in a simulated environment. This document shall not be referenced or utilized in live operations in the National Airspace System (NAS). The Atlanta ARTCC, VATUSA, and VATSIM do not take any responsibility for uses of this order outside of the simulation environment.

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RECORD OF CHANGES

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Chapter 1: General

1-1-1. Purpose

This order provides procedural guidance and clarification for the virtual Atlanta Air Route Traffic Control Center Training Flow program.

1-1-2. Audience

This Order applies to all controllers who provide air traffic control services at a ZTL-designated facility.

1-1-3. Location of Order

This Order is available for public viewing in the ZTL files library located at https://www.ztlartcc.org/controllers/files.

1-1-4. Cancellation

This Order cancels the previous ZTL 3120.4F dated December 1, 2022. Students who are currently in progress with the previous training flow may continue to follow the previous flow until they complete their current stage of training.

1-1-5. Effective Date

This Order is effective as of February 1, 2024.

Chapter 2: General Training Policies

Note - Trainer policies and requirements are maintained in the ZTL Facility Administrative Policy.

Note - For the purposes of this order, "Trainer" or "Training Staff" refers to both mentors and instructors authorized to teach on the specific topic referenced.

Section 1: Requesting Training

2-1-1. How To Request Training

There are two methods that students may exercise to request training.

- **a. Method 1 Online Scheduling:** Using the "Schedule a Training Session" link on the ZTL website allows students to schedule training sessions in advance. Students may request training through the online system by completing the following steps:
 - i. Signing onto the ZTL ARTCC website at ztlartcc.org.
 - ii. Access the controller dashboard (ztlartcc.org/dashboard).
 - iii. Opening the "training" dropdown, on the left side of the dashboard.
 - iv. Clicking "Schedule a Training Session", and following the steps located in the pop-up. Sessions may be booked up to 2 weeks in advance, but not less than 24 hours without trainer approval. Students may not have more than one online session booked. Sessions scheduled through "impromptu training" (Method 2) do not count towards the one session limit.
- **b. Method 2 Impromptu Training:** Impromptu Training allows students/trainers with variable schedules to schedule training with little or no notice. Impromptu Training is scheduled through the appropriate channels in the ZTL discord.

Note - Access to the ZTL discord is typically restricted to ZTL home and visitor controllers. The discord invite is available in the welcome message on the ZTL TeamSpeak.

2-1-2. Special Considerations

Special Considerations for changes to the above methods will be made on a case by case basis only after a request by the student has been made in writing via email to the Training Administrator (TA) at training@ztlartcc.org.

2-1-3. Improper Methods of Training Requests

The two methods described in 2-1-1 are the only ways students shall request training. Students shall not ask for training in the ZTL TeamSpeak or by directly messaging a trainer on any platform including but not limited to:

- Discord (including via private message)
- Controller Client
- Pilot Client

2-1-4. Violations

Repeated violation of the above clause(s) may result in a temporary suspension of the student's ability to request and/or receive training.

2-1-5. Recurrent Training

ZTL provides additional training for controllers already certified for a position at the controllers request. This is done with the following considerations:

- a. ZTL may provide special recurrent training sessions prior to major events or for any controller who wants to refresh their knowledge, skills and improve their proficiency.
- b. Recurrent training shall not be required to qualify for event sign-ups, or for the purpose of receiving a position for an event. However, it is a resource all controllers are strongly encouraged to utilize. Recurrent training sessions will be offered in the format of regular scheduled training sessions, where controllers may sign-up via provided links on the ARTCC website. Recurrent training sessions will follow the structure of lessons published in ZTL's training order. Controllers' performance in these sessions shall be evaluated using the criteria set forth in these lessons.
 - Recurrent training sessions are not solely evaluations; the instructor shall provide feedback and guidance to correct any deficiencies observed during the session(s).
- c. The evaluation of a controller's performance in recurrent training sessions will not be punitive. The instructor may only recommend additional training if, in their assessment, it would benefit the controller. They may not remove any certification(s) or recommend removal of any certification(s) based on the result of a recurrent training session.

Section 2: Training Sessions

2-2-1. How Training is Conducted

All training sessions are primarily conducted over voice in the ZTL TeamSpeak server. Discord may be used to supplement the voice sessions with powerpoints, screen sharing, and other auditory/visual aids. Students are expected to arrive prepared to learn the subject they requested training on. Students are requested to arrive at least five (5) minutes prior to the session start time and wait in the ZTL TeamSpeak for further instructions from their trainer.

- **a. TeamSpeak Training Channels:** Training channels should be used exclusively for training. If a person wishes to observe a training session, they shall ask the trainer for permission before entering or being moved into that channel.
- **b.** Observing a Training Session: In compliance with the above point (a), a person who is allowed to observe a session shall not be an active participant in the training session and only speak in the channel when invited to do so by the trainer.

2-2-2. Session Scheduling Penalties

Students must make all efforts to cancel sessions greater than 24 hours prior to the time that the session is scheduled for. Additionally:

- a. A student is considered a "no show" if they fail to appear after a period of time set at the discretion of their trainer. This time must be no earlier than 5 minutes after the session is scheduled to begin.
 - Note Students that are considered a "no show" will have their training session canceled and the failure to appear documented.
- b. A trainer is considered a "no show" if they fail to appear within 20 minutes of the scheduled training time. Should a trainer no show, the affected student may file a complaint with the TA, in writing, at ta@ztlartcc.org, no later than 24 hours after the occurrence.
- c. Preparation is key for all training sessions. Students that appear to be unprepared for training will have the session terminated early, and will be directed to the appropriate resources.

2-2-3. Session Scheduling Penalties

Habitual offenders of ZTL scheduling policies may be restricted from scheduling training. A habitual offender is defined as a person who violates posting policies (Discord) or cancellation policies (Online Scheduling) at least two times.

- a. Students who are restricted from scheduling training online will typically be notified via email of the cause for the restriction and the suspension termination date.
- b. Students that fail to abide by the Discord posting policy may have their access removed without notice.

2-2-4. Monitoring Policies

Live network monitoring is a crucial component to ensuring students are prepared for certification.

- a. Trainers may not conduct "Down-Up" monitoring (work a position lower than a student being monitored on position).
- b. Unless otherwise authorized (by this document or the TA), live network monitoring is a prerequisite for all Tier 1 position certification issuance. Sweatbox may only be used in lieu of monitoring if live network traffic levels are not sufficient for certification.
- c. Unless otherwise authorized by the TA, an instructor/mentor may not certify a student on a Tier 1 position and/or rating upgrade that requires monitoring if they conducted more than 70% of that student's training on the position(s).
- d. Students may only be monitored during an event with the approval of the Events Coordinator (EC) and the TA.

2-2-5. Solo Endorsement

Solo endorsements (or "solo-cert") are a crucial component to successful training. Students working a position with only a solo endorsement must follow all VATSIM mandated policies with respect to solo certifications, as well as the following restrictions, unless otherwise noted.

- a. Students working Atlanta Center may not work in support of Tier 1 events declared OPLEVEL3 or higher by the virtual Air Traffic Control System Command Center.
- b. Students may not use their solo-cert to work vZTL sponsored events without approval by the EC and TA.
- c. Mentors may not conduct monitoring sessions while operating under a solo-cert.

2-2-6. Training Flow

- a. The training flow follows a set of lessons which must be completed in order prior to certification/rating-change.
 - i. Lessons may be designated optional and are at the discretion of the trainer as to if the student should complete the lesson.
- b. Lessons can be divided into two types:
 - Sweatbox This is a session wherein the primary activities involve the trainer and/or student demonstrating concepts previously learned (either from self-study or previous sessions). These are demonstrated by the completion of approved sweatbox scenarios.
 - ii. Monitoring This is a session where the student is observed on the network by a trainer. The trainer is primarily responsible for the safe, orderly, and expeditious flow of traffic, and the student will complete delegated control functions, up to and including, the entire control position itself. If traffic levels are not high enough to warrant certification, sweatbox may be used in lieu of live network monitoring.
- c. Lessons are not considered complete unless all listed objectives are completed satisfactorily at the discretion of the trainer conducting the session.

Section 3: Other

2-3-1. Tier 1 Training

Visitors must hold the relevant rating (S2 for ATL ATCT, S3 for A80) for at least 30 days to be eligible for endorsement on ATL ATCT and/or A80. ZTL does not provide ATL ATCT endorsements for persons who only hold the S1 rating without approval by the TA.

2-3-2. Training Flow Compliance

- a. Deviations from established airports/sweatbox scenarios are permissible so long as the substituted airfield and/or sweatbox scenario is approved by the TA (or designee).
- b. Training staff may insert additional sessions to ensure student understanding of a subject matter. These additional sessions must not be used to deviate from the order that subjects are introduced, rather, they should be used to augment student understanding on subjects in which that a student is found to be non-proficient.
- Students who are eligible to receive multiple types of training (e.g. ATL
 Clearance/Ground/Tower AND S3 Approach) must not concurrently pursue the different
 training flows.
- d. Upon the third (and subsequent) failure of a student to complete the objectives listed in a particular scenario/lesson, training staff must consult with the ZTL TA prior to the continuation of the student's training.

2-3-3. Certification of Transferring/Visiting Controllers

- a. Persons transferring to ZTL following an extended absence from controlling within the VATSIM United States of America division typically will have no certifications upon acceptance and may be required to complete VATUSA Academy courses corresponding to their current rating.
- Persons transferring or visiting from outside of VATUSA may be required to undergo a
 practical controller competency check in accordance with the VATSIM Global Controller
 Administration Policy (GCAP) to ensure compliance with FAA procedures and
 phraseology.

2-3-4. Transfers with External Experience

Persons who wish to transfer in Tier 1/2 experience not held on the VATSIM network should email a written request to <u>ta@ztlartcc.org</u>. The request should, at a minimum, include experience held and ratings requested. The ZTL Training Department will attempt to validate and issue certifications with minimal delay.

Note - For the purposes of this section, "issue certifications with minimal delay" typically involves excusing theory sessions. Failure during training sessions may result in the revocation of exemptions issued under this section.

2-3-5. Mentor Selection Guidance

- a. Persons interested in joining the ZTL Training Department as instructional staff should make themselves familiar with the content of the vZTL Facility Administrative Policy 2-6.
- b. After reviewing the previous document, please state your request in writing, via email, to training@ztlartcc.org.
- c. Prior to receiving Training Staff responsibilities and privileges, the candidate may be required to complete additional training pursuant to the role for which they are attempting to become. This may include, but is not limited to:
 - i. Observing Sessions
 - 1. Generally 2 sessions of different type
 - ii. Act as a Remote Pilot Operator (RPO)
 - 1. The primary role of the RPO is to issue commands to simulated pilots
 - 2. Generally 2 sessions
 - iii. Administer at least 1 theory session under the supervision of a fully qualified Mentor.
 - 1. Note A fully qualified mentor, for this provision, is defined as any mentor that holds the certifications applicable for their rating.
 - iv. Administer at least 1 monitoring session on the live network.
 - v. Additional training may include additional items as needed.
- d. Upon completion of these tasks, a person may be awarded the privileges previously listed in this document or may be removed from Mentor Training without awarding the Mentor role.

2-3-6. Program Trial Authorizations

In the interest of innovating with training procedures, the ZTL TA may, with the approval of the VATUSA Training Services department (as necessary), enact temporary Program Trial Authorizations (PTA). A list of active Program Trial Authorizations are available on request from ta@ztlartcc.org.

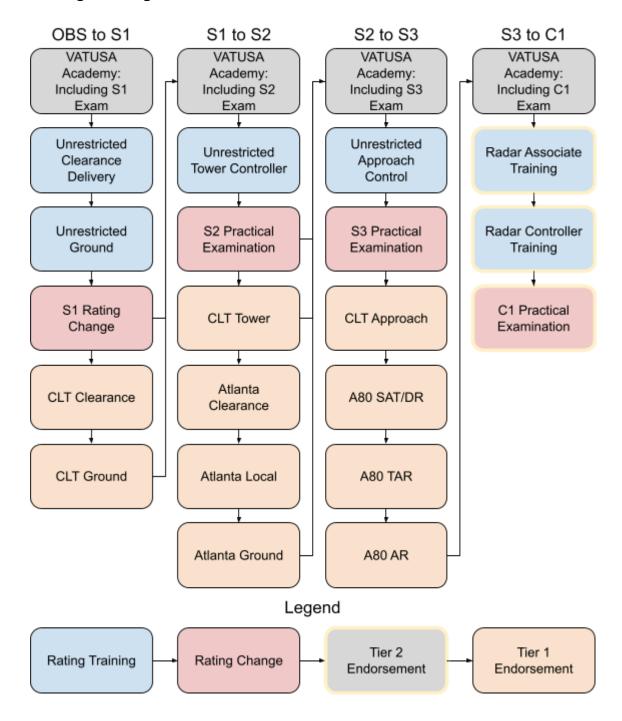
2-3-7. Previously Certified Controllers

Controllers previously endorsed for Tier 1 and/or Tier 2 designated facilities that do not currently hold said endorsements may request expedited certification flow in writing with the TA, or designee, by email to training@ztlartcc.org. The TA will make final determination on the flow to be followed.

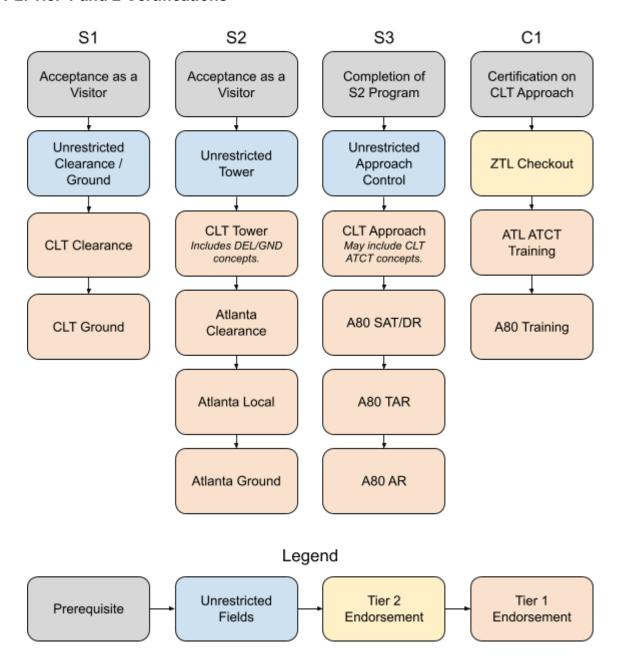
Chapter 3: Rating Training Flow Overview

The below flow charts are for reference only. Refer to Chapters 4, 5, and 6 for detailed training flow requirements.

3-1-1. Rating Training



3-1-2. Tier 1 and 2 Certifications



Chapter 4: Rating Training

Note - This chapter only covers the training flow structure in regards to rating upgrades. For Tier 1 and Tier 2 endorsements see Chapter 5.

Note - Unless otherwise noted, a prerequisite to begin a session is the successful completion of the previously prescribed session.

Section 1: Observer (OBS) to Developing Controller (S1)

4-1-1. Delivery 1 (DEL1)

- a. Prerequisites:
 - i. Hold an observer rating with the ZTL ARTCC.
 - ii. Completed the ATC Basics/Delivery/Ground Academy Course.
- b. Facility: PDK
- c. Concepts Covered:
 - i. General
 - 1. Demonstrates an understanding of the Clearance Delivery.
 - 2. Shows an understanding of flight strips (if used) and radar data blocks.
 - 3. Demonstrates an understanding of weather conditions.
 - 4. Demonstrates ability to read METARs and TAFs.
 - 5. Demonstrates an understanding of different Airspace Classes.
 - 6. Demonstrates an understanding of the role of each Air Traffic Control position plays in the Air Traffic System.
 - 7. Ability to connect to the network and configure the controlling and audio client to work Clearance Delivery and Ground positions.
 - ii. Other
 - 1. The VATSIM Network Structure.
 - 2. VATSIM/VATUSA/ZTL ARTCC Policies.
- d. Other Notes:
 - i. This session may be combined with DEL2.

4-1-2. Delivery 2 (DEL2)

- a. Prerequisites:
 - i. Hold an observer rating with the ZTL ARTCC. (If combined with DEL1).
 - ii. Completed the ATC Basics/Delivery/Ground Academy Course. (If combined with DEL1).
- b. Facility: PDK
- c. Concepts Covered:
 - i. General
 - 1. Demonstrates an understanding of the Clearance Delivery Controller.
 - 2. Shows an understanding of flight strips (if used) and radar data blocks.
 - 3. Demonstrates an understanding of weather conditions.
 - 4. Demonstrates ability to read METARs and TAFs.

- 5. Demonstrates an understanding of different Airspace Classes.
- 6. Demonstrates an understanding of the role of each Air Traffic Control.
- 7. Position plays in the Air Traffic System.
- 8. Ability to connect to the network and configure the controlling and audio client to work Clearance Delivery and Ground positions.
- ii. Clearance Delivery Concepts
 - 1. Defines all parts of a clearance.
 - 2. Demonstrates a basic understanding of:
 - a. Altimetry (Lowest Usable Flight Level).
 - b. Navigation and Equipment Codes.
 - c. Types of Navigational Aids.
 - 3. Ability to issue a clearance correctly.
 - 4. Ability to edit flight plans and issue reroutes to pilots.

4-1-3. Delivery 3 (DEL3)

- a. Prerequisites:
 - i. Completed DEL2.
- b. Facility: BHM
- c. Concepts Covered:
 - i. General
 - 1. Demonstrates an understanding of the Clearance Delivery Controller.
 - 2. Uses prescribed phraseology.
 - 3. Shows an understanding of flight strips (if used) and radar data blocks.
 - 4. Demonstrates an understanding of weather conditions.
 - 5. Demonstrates ability to read METARs and TAFs.
 - 6. Demonstrates an understanding of different Airspace Classes.
 - 7. Demonstrates an understanding of the role of each Air Traffic Control
 - 8. Position plays in the Air Traffic System.
 - 9. Ability to connect to the network and configure the controlling and audio client to work Clearance Delivery and Ground positions.
 - ii. Clearance Delivery Concepts
 - 1. Defines all parts of a clearance.
 - 2. Demonstrates a basic understanding of:
 - a. Altimetry (Lowest Usable Flight Level).
 - b. Navigation and Equipment Codes.
 - c. Types of Navigational Aids.
 - 3. Ability to issue a clearance correctly.
 - 4. Ability to edit flight plans and issue reroutes to pilots.

4-1-4. Ground 1 (GND1)

- a. Prerequisites:
 - i. Completed DEL3
- b. Facility: BHM
- c. Concepts Covered:
 - i. All previous Concepts
 - ii. General
 - 1. Demonstrates an understanding of the Clearance Delivery and Ground Controller.
 - 2. Shows an understanding of flight strips (if used) and radar data blocks.
 - 3. Demonstrates situational awareness and basic scan techniques.

d. Certification

 Upon successful completion of this lesson, and with Instructor concurrence, the S1 rating shall be issued along with unrestricted clearance delivery and ground certifications.

Section 2: Developing Controller (S1) to Aerodrome Controller (S2)

All S1 competencies are required to continue at a satisfactory level due to the Top-Down Nature of VATSIM IAW GCAP A.1.

4-2-1. Tower 1 (TWR1)

- a. Prerequisites:
 - i. Completion of VATUSA Academy and S2 Exam
 - ii. While not required, it is highly recommended that controllers have at least Tier 2 certifications for CLT Ground.
- b. Facility: PDK
- c. Concepts Covered:
 - i. General
 - 1. Demonstrates an understanding of the role of the local (tower) controller.
 - 2. Selects the appropriate runway configuration based on weather, procedure, and operational requirements.
 - 3. Issues appropriate takeoff and departure instructions as needed.
 - 4. Uses prescribed phraseology for takeoff and landing clearances.
 - 5. Defines all parts of a VFR traffic pattern (circuit).
 - 6. Ensures aircraft are separated as required.
 - 7. Correctly transfers aircraft to the next controller.
 - ii. Coordination
 - 1. Coordinates other elements as required with the appropriate controller.
 - a. Position Relief Briefings.

4-2-2. Tower 2 (TWR2)

- a. Prerequisites:
 - i. Completed TWR1
- b. Facility: PDK
- c. Concepts Covered:
 - i. General
 - 1. Demonstrates an understanding of the role of the local (tower) controller.
 - 2. Selects the appropriate runway configuration based on weather, procedure, and operational requirements.
 - 3. Issues appropriate takeoff and departure instructions as needed.
 - 4. Uses prescribed phraseology for takeoff and landing clearances.
 - 5. Defines all parts of a VFR traffic pattern (circuit).
 - 6. Ensures aircraft are separated as required.
 - a. Introduction to SRS
 - b. Sequencing/Spacing Techniques (360s, 270s, S-Turns, etc.)
 - 7. Issues missed approach / go around instructions using prescribed phraseology.
 - 8. Correctly transfers aircraft to the next controller.

ii. Coordination

- 1. Coordinates missed approaches / go arounds with the appropriate controller.
- 2. Coordinates other elements as required with the appropriate controller.

4-2-3. Tower 3 (TWR3)

- a. Prerequisites:
 - i. Completed TWR2
- b. Facility: PDK
- c. Concepts Covered:
 - i. General
 - 1. Demonstrates an understanding of the role of the local (tower) controller.
 - 2. Selects the appropriate runway configuration based on weather, procedure, and operational requirements.
 - 3. Issues appropriate takeoff and departure instructions as needed.
 - 4. Uses prescribed phraseology for takeoff and landing clearances.
 - 5. Defines all parts of a VFR traffic pattern (circuit).
 - 6. Ensures aircraft are separated as required.
 - 7. Issues missed approach / go around instructions using prescribed phraseology.
 - 8. Correctly transfers aircraft to the next controller.
 - ii. Coordination
 - 1. Coordinates missed approaches / go arounds with the appropriate controller.
 - Coordinates other elements as required with the appropriate controller.
 - a. IFR Releases

4-2-4. Tower 4 (TWR4)

- a. Prerequisites:
 - Completed TWR3
- b. Facility: BHM
- c. Concepts Covered:
 - i. General
 - 1. Demonstrates an understanding of the role of the local (tower) controller.
 - 2. Selects the appropriate runway configuration based on weather, procedure, and operational requirements.
 - 3. Issues appropriate takeoff and departure instructions as needed.
 - 4. Uses prescribed phraseology for takeoff and landing clearances.
 - 5. Defines all parts of a VFR traffic pattern (circuit).
 - 6. Ensures aircraft are separated as required.
 - 7. Issues missed approach / go around instructions using prescribed phraseology.
 - 8. Ensures adequate wake turbulence and departure separation exists.

- 9. Correctly transfers aircraft to the next controller.
- ii. Coordination
 - 1. Coordinates missed approaches / go arounds with the appropriate controller.
 - 2. Coordinates other elements as required with the appropriate controller.

4-2-5. Tower 5 (TWR5)

- a. Prerequisites:
 - i. Completed TWR4
- b. Facility: BHM
- c. Concepts Covered:
 - i. All Previous Topics
 - ii. Introduction to CTRD Functions
 - 1. Basic Radar Services for Separation and Wake Turbulence Applications

4-2-6. Tower 6 (TWR6)

- a. Prerequisites:
 - Completed TWR5
- b. Facility: GSO
- c. Concepts Covered:
 - i. All previous Topics
 - ii. Line-Up-And-Wait Principles

4-2-7. Tower 7 - Monitoring (TWR7)

- a. Prerequisites:
 - i. Completed TWR6
- b. Facility: GSO
- c. Concepts Covered:
 - i. All S1 and S2 Topics
- d. Completion:
 - i. Upon successful completion of this lesson the student shall be issued a solo endorsement (if appropriate and with instructor concurrence) for GSO, and be recommended for their S2 Practical Examination. This solo-cert will be valid for a maximum of 30-days and will not be extendable except with TA Approval.

Section 3: Aerodrome Controller (S2) to Terminal Controller (S3)

All S2 competencies are required to continue at a satisfactory level due to the Top-Down Nature of VATSIM IAW GCAP A.1.

4-3-1. Approach 1 (APP1)

- a. Prerequisites:
 - i. Completion of VATUSA Academy and S3 Exam
 - ii. While not required, it is highly recommended that controllers have at least Tier 2 certifications for CLT Tower.
- b. Facility: BHM
- c. Concepts Covered:
 - i. General
 - 1. Understands the role of the arrival and departure controller.
 - 2. Understands horizontal and vertical airspace boundaries.
 - 3. Ensures aircraft are properly transferred to the next controller.
 - 4. Shows intermediate scan techniques.
 - 5. Verifies mode C altitude of aircraft.
 - 6. Issues alerts / traffic information to aircraft using prescribed phraseology as required.
 - 7. Adjusts aircraft speed, heading, and altitude as needed to achieve required separation.
 - 8. Correctly transfer radar tag ownership and communication to the next controller.
 - 9. Ability to utilize the approved ATC client to work the control position.
 - ii. Departure Controller
 - Ability to cancel departure procedures and apply vectors or additional instructions as necessary to transition aircraft from the terminal to the Enroute environment.

4-3-2. Approach 2 (APP2)

- a. Prerequisites:
 - i. Completed APP1
- b. Facility: BHM
- c. Concepts Covered:
 - i. All previous concepts.
 - ii. Approach Controller
 - 1. Issues approach clearances using prescribed phraseology.
 - 2. Applies separation minima as required by airspace class.
 - 3. Ensures pilots have current weather.
 - 4. Provides runway and approach information as soon as practical to pilots.
 - 5. Demonstrates an understanding of the different types of approaches.

6. Correctly transfers radar identification and communication to the next controller.

4-3-3. Approach 3 (APP3)

- a. Prerequisites:
 - i. Completed APP2
- b. Facility: BHM
- c. Concepts Covered:
 - i. All previous concepts.
 - ii. Handles uncontrolled field operations in accordance with policy.

4-3-4. Approach 4 (APP4)

- a. Prerequisites:
 - i. Completed APP3
- b. Facility: BHM
- c. Concepts Covered:
 - i. All previous concepts.

4-3-5. Approach 5 (APP5)

- a. Prerequisites:
 - i. Completed APP4
- b. Facility: GSO
- c. Concepts Covered:
 - i. All previous concepts.
 - ii. Coordination
 - 1. Ability to coordinate missed approaches and runway changes with the local controller.
 - 2. Ability to coordinate exceptions to local standard operating procedures.

4-3-6. Approach 6 (APP6)

- a. Prerequisites:
 - Completed APP5
- b. Facility: GSO
- c. Concepts Covered:
 - i. All previous concepts.
 - ii. Issues holding instructions using prescribed phraseology.

4-3-7. Approach 7 - Monitoring (APP7)

- a. Prerequisites:
 - i. Completed APP6
- b. Facility: GSO
- c. Concepts Covered:

i. All previous concepts.

d. Completion:

i. Upon successful completion of this lesson the student shall be issued a solo endorsement (if appropriate and with instructor concurrence) and be recommended for their S3 Practical Examination.

Section 4: Terminal Controller (S3) to Enroute Controller (C1)

The following training takes place at ZTL ARTCC and therefore does not have a facility listed.

All S3 competencies are required to continue at a satisfactory level due to the Top-Down Nature of VATSIM IAW GCAP A.1.

4-4-1. Center 1 (CTR1)

- a. Prerequisites:
 - i. Completion of VATUSA Academy and C1 Exam.
 - ii. Tier 1 Approach Endorsement (A80).
 - iii. Review ERAM Commands.
 - iv. CRC Scope must be set up.
 - 1. Students should ask for help prior to their CTR1 session should they need help setting up their Scope.
 - v. While not required, students should have at least 25 hours controlling A80 on the live network after receiving their Tier 1 Endorsement.
- b. Concepts Covered:
 - i. Flight Data Position (FD).
 - ii. Radar Associate Position (RA or D-Side).
 - iii. ERAM Commands.
 - iv. Basic Coordination and Separation Techniques.
- c. Completion:
 - Upon successful completion of this lesson, students may continue to perform FD/D-Side functions under limited supervision from fully-certified trainers.
 Students may not perform these functions during ZTL-sponsored or supported events without prior approval of the TA and EC.

4-4-2. Center 2 (CTR2)

- a. Prerequisites:
 - Completion of CTR1
- b. Concepts Covered:
 - i. General
 - 1. Demonstrates an understanding of the enroute environment and role of the enroute controller.
 - Ability to connect to the network utilizing an approved enroute controller client and manage multiple frequencies / transceivers within the audio client.
 - 3. Demonstrates an advanced level of situational awareness and scan.
 - ii. Coordination
 - 1. Coordinates with other Air Traffic Controllers when necessary, to ensure traffic is adequately spaced and sequenced.
 - iii. Traffic Management

- 1. Using prescribed phraseology, provides necessary vectors to aircraft in a manner consistent with the expeditious flow of traffic.
- 2. Adjusts aircraft speed or track to achieve initial sequencing for arrival.
- 3. Provides appropriate lateral and vertical separation to aircraft in a surveillance / non-surveillance environment.
- 4. Demonstrates the concept of positive control by avoiding issuing control instructions that could cause conflict.
- c. Other Notes:
 - i. This session is completed in the "Ultra-High" sectors for separation of overflights.

4-4-3. Center 3 (CTR3)

- a. Prerequisites:
 - i. Completed CTR2
- b. Concepts Covered:
 - i. All previous concepts.
 - ii. Airspace Services
 - 1. Provides traffic services as appropriate to the class of airspace.
 - 2. Provides weather, traffic, and any other information to pilots using prescribed phraseology.
 - 3. Understands and approves route deviation requests by pilots when able.
- c. Other Notes:
 - i. This lesson focuses on the "departure sectors" of ZTL.

4-4-4. Center 4 (CTR4)

- a. Prerequisites:
 - Completed CTR3
- b. Concepts Covered:
 - i. All previous concepts.
 - Issues descent and STAR clearances / instructions in a timely manner using prescribed phraseology.
- c. Other Notes:
 - i. This lesson focuses on the "arrival sectors" of ZTL.

4-4-5. Center 5 - Monitoring (CTR5)

- a. Prerequisites:
 - Completed CTR4
- b. Concepts Covered:
 - i. All previous concepts.
- c. Other Notes:
 - i. This is monitoring on "low" sectors to reinforce previous concepts.

4-4-6. Center 6 (CTR6)

- a. Prerequisites:
 - i. Completed CTR5
- b. Concepts Covered:
 - i. All previous concepts.
 - ii. Advanced Center Concepts.
 - 1. Holding.
 - 2. Merging Arrivals.
- c. Other Notes:
 - i. This session focuses on merging arrival traffic and utilizing holding to comply with LOA and Traffic Management Initiatives.

4-4-7. Center 7 - Monitoring (CTR7)

- a. Prerequisites:
 - i. Completed CTR6
- b. Concepts Covered:
 - i. All previous concepts.
- c. Completion:
 - Upon successful completion of this lesson the student shall be issued a solo endorsement (if appropriate and with instructor concurrence) and be recommended for their C1 Practical Examination.

Chapter 5: Tier 2 Training

Section 1: Atlanta ARTCC (ZTL)

5-1-1. Atlanta Center Checkout (ZTL1)

- a. Prerequisites:
 - Tier 1 endorsements for CLT ATCT (Tower Cab and Tracon).
 - ii. Students must review the ZTL/Minor Field Letter of Agreement and ZTL SOP prior to session start time.
 - iii. C1 Rating or greater.
 - Note: For ZTL Home Controller C1 Training, which includes the Tier 2 endorsement, see Chapter 4, Section 4. This lesson does include previously certified home controllers.
- b. Concepts Covered:
 - i. ZTL
- c. Completion:
 - i. Upon successful completion of this lesson, the student is considered Atlanta Center certified (Tier 2). This certification does not include Tier 1 airspace of ATL and/or A80. Controllers who hold the ZTL certification but do not hold A80 certifications may only control when A80 is covered by a different, fully certified, controller.

Chapter 6: Tier 1 Training

Section 1: CLT Tower Cab

The following training takes place at CLT ATCT and therefore does not have a facility listed.

6-1-1. CLT Clearance Delivery (CC1)

- a. Prerequisites:
 - S1 Rating.
- b. Concepts Covered:
 - i. CLT SOP Specifics.
 - ii. PRD Command.
 - iii. vTDLS.
- c. Other Notes:
 - i. This session may be combined with CC2.

6-1-2. CLT Ground (CC2)

- a. Prerequisites:
 - i. Tier 2 Endorsement for Delivery.
 - ii. S1 Rating (If combined with CC1).
- b. Concepts Covered:
 - i. CLT SOP Specifics.
- c. Completion:
 - Upon successful completion of this lesson the student shall be issued Tier 1 certification through CLT DEL/GND.

6-1-3. CLT Local 1 (CC3)

- a. Prerequisites:
 - i. S2 Rating.
 - ii. Tier 2 Endorsement for Ground.
- b. Concepts Covered:
 - CLT SOP specifics including RECAT/CWT.
 - ii. Advanced CTRD Functions.
 - iii. Airborne Class B Clearances.

6-1-4. CLT Local 2 (CC4)

- a. Prerequisites:
 - i. Completion of CC3
- b. Concepts Covered:
 - CLT Split Local and CIC functions.

6-1-5. CLT Tower Cab (CC5)

- a. Prerequisites:
 - i. Completion of CC4
- b. Concepts Covered:
 - i. All previous concepts.
 - ii. Combined cab best practices.
- c. Other notes:
 - Visitors of ZTL with prior Tier 1 endorsements (at their home subdivision) or previously certified CLT controllers may be allowed to complete this lesson alone to meet Tier 1 certification requirements for all CTL Tower Cab positions.

6-1-5. CLT Tower Cab - Monitoring (CC6)

- a. Prerequisites:
 - i. Completion of CC5
- b. Concepts Covered:
 - i. All previous concepts.
- c. Completion:
 - Upon successful completion of this lesson the student shall be issued Tier 1 certification through CLT TWR.
- d. Other Notes:
 - Students may be issued Tier 1 solo-certs (if appropriate and with instructor concurrence) prior to the Tier 1 endorsement. This solo-cert will be valid for a maximum of 30-days and will not be extendable except with TA Approval.

Section 2: CLT TRACON

The following training takes place at CLT ATCT and therefore does not have a facility listed.

6-2-1. CLT Satellite and Departure Radar (CT1)

- a. Prerequisites:
 - i. Controller must hold the S3 rating.
 - ii. Controller must hold Tier 1 endorsements through CLT Tower cab.
- b. Concepts Covered:
 - i. CLT SOP Specifics.
 - ii. CLT LOA Specifics.

6-2-2. CLT Arrival Radar (CT2)

- a. Prerequisites:
 - i. Completed CT1.
- b. Concepts Covered:
 - i. CLT flow control and feeding the Final.

6-2-3. CLT Final Radar (CT3)

- a. Prerequisites:
 - i. Completed CT2.
- b. Concepts Covered:
 - i. C-to-A.
 - ii. Simultaneous Parallel Approaches.
 - iii. Capture points.
 - iv. Go-arounds.

6-2-4. CLT TRACON Combined (CT4)

- a. Prerequisites:
 - i. Completion of CT3
- b. Concepts Covered:
 - i. All previous concepts.
 - ii. Combined TRACON best practices.

6-2-5. CLT TRACON - Monitoring (CT5)

- a. Prerequisites:
 - i. Completion of CT4
- b. Concepts Covered:
 - i. All previous concepts.
- c. Completion:
 - Upon successful completion of this lesson the student shall be issued Tier 1 certification through CLT ATCT (Tower and TRACON).

Section 3: Atlanta ATCT

6-3-1. Atlanta Clearance Delivery (ATL1)

- a. Prerequisites:
 - i. S2 Rating
 - ii. Tier 1 Endorsment for CLT Tower Cab.
 - iii. Successful completion of Atlanta ATCT SOP/LOA Exam on academy.vatusa.net.
- b. Concepts Covered:
 - Standard Departure Split
 - ii. Cross Complex Departures
 - iii. Coded Departure Routes
 - iv. ATL#, WIGLE#, ZELAN# SIDs
 - v. Initial Altitude Assignment
 - vi. Departure Frequency Assignment
 - vii. Information Display System
- c. Completion:
 - Upon completion of this lesson, the student is considered Tier 1 certified for ATL DEL.

6-3-2. Atlanta Local 4 and 5 (ATL2)

- a. Prerequisites:
 - i. Completed ATL1.
- b. Concepts Covered:
 - Arrival procedures and best practices.

6-3-3. Atlanta Local 3 and 4 (ATL3)

- a. Prerequisites:
 - i. Completed ATL2.
- b. Concepts Covered:
 - i. Combined arrival and departure procedures.

6-3-4. Atlanta Ground Introduction (ATL4)

- a. Prerequisites:
 - i. Completed ATL3.
- b. Concepts Covered:
 - i. Runway Assignments.
 - ii. Sequencing.
 - iii. Aircraft APREQs & appropriate holding areas.
 - iv. Standard Taxi Routes.
 - v. Changing Departure Runways.
 - vi. Ground Meter position.
 - vii. LA/LB/LC, 9L @ M2, Taxiway V and W operations.

6-3-5. Atlanta Ground (ATL5)

- a. Prerequisites:
 - i. Completed ATL4.
- b. Concepts Covered:
 - i. All previous concepts.

6-3-6. Atlanta ATCT (ATL6)

- a. Prerequisites:
 - i. Completed ATL5.
- b. Concepts Covered:
 - i. All previous concepts.
 - ii. Combined ATL ATCT best practices.

6-3-7. Atlanta ATCT - Monitoring (ATL7)

- a. Prerequisites:
 - i. Completed ATL5.
- b. Concepts Covered:
 - i. All previous concepts.
- c. Completion:
 - Upon successful completion of this lesson the student shall be issued Tier 1 certification through ATL ATCT.
- d. Other Notes:
 - i. Students may be certified progressively as they complete monitoring. I.e. The Tier 1 ATL Ground endorsement may be issued separately from the Tier 1 ATL Tower endorsement at the trainers discretion.

6-3-8. Atlanta ATCT CIC - Optional (ATL8)

- a. Prerequisites:
 - Controller must be fully certified for ATL ATCT.
- b. Concepts Covered
 - CIC and Cab Coordinator functions.
- c. Other Notes:
 - i. This lesson is optional and serves to reinforce the concepts and skills to work ATL ATCT CIC and Cab Coordinator positions.

Section 4: Atlanta Large-TRACON (A80)

6-4-1. A80 Satellite Radar - SAT (A801)

- a. Prerequisites:
 - Controller must be fully certified for ATL ATCT.
 - ii. Controller must hold Tier 1 endorsements through CLT ATCT (Tower and TRACON).
 - iii. Completion of A80 Satellite Radar Exam on VATUSA Academy.
- b. Concepts Covered
 - i. ATL Airport Turn-Arounds
 - ii. Class B airspace
 - iii. Class D airspace
 - 1. A80 SAT ATCT LOA
 - iv. Corridor Operations
 - 1. Aircraft Landing ATL
 - 2. Headings within Corridor
 - v. Convective Weather
 - vi. Transfer of Control to other sectors
 - vii. IFR Separation for VFR Practice Approaches
 - viii. MVA
 - ix. ODO Operations
 - x. Problem Areas
 - xi. ZTL/A80 LOA & Coordination
- c. Completion:
 - This session may result in full SAT Tier 1 Endorsment, at the discretion of the trainer. Controller may only log onto the network when another, fully certified controller, is online and covering A80 functions not operated by this controller (i.e. DR, TAR, AR).

6-4-2. A80 Departure Radar - DR (A802)

- a. Prerequisites:
 - i. Completed A801.
 - ii. Completion of A80 Departure Radar Exam on VATUSA Academy.
- b. Concepts Covered:
 - i. Departure Gates / Airspace Splits
 - ii. Noise Abatement Procedures
 - iii. Pre-Arranged Coordination Areas
 - iv. Wake Turbulence
 - v. RNAV Procedures
 - vi. Satellite Departure Procedures
 - vii. Speed Control
 - viii. Hazardous Weather / Thunderstorm Operations
 - ix. TMU Departure Restrictions

- x. Unusual Situations
 - 1. Aircraft returning to ATL
 - 2. Class B overflights
- c. Completion:
 - This session may result in full DR Tier 1 Endorsment, at the discretion of the trainer. Controller may only log onto the network when another, fully certified controller, is online and covering A80 functions not operated by this controller (i.e. TAR, AR).

6-4-3. A80 Terminal Arrival Radar - TAR 1 (A803)

- a. Prerequisites:
 - i. Completed A802.
 - ii. Completion of A80 Terminal Arrival Radar Exam on VATUSA Academy.
- b. Concepts Covered:
 - i. ATL Airport Turn Arounds
 - ii. Class B Requirements
 - iii. Pre-Arranged Coordination Areas
 - iv. Wake Turbulence
 - v. SOP Potential Problem Areas
 - vi. Hazardous Weather / Thunderstorm Operations
 - vii. Planning for Airport Shutdowns
 - viii. Transfer of Control between TARs
 - ix. Optimized Profile Descents (OPDs)
 - x. Phraseology to Cancel/Re-Issue
 - xi. Best Practices
- c. Other Notes:
 - This is an introductory lesson designed to familiarize the students with the above concepts.

6-4-4. A80 Terminal Arrival Radar - TAR 2 (A804)

- a. Prerequisites:
 - Completed A803.
- b. Concepts Covered:
 - All previous concepts.
- c. Other Notes:
 - This lesson is designed to verify the students ability to work the TAR position.

6-4-5. A80 Arrival Radar - AR 1 (A805)

- a. Prerequisites:
 - i. Completed A804.
 - ii. Completion of A80 Final Radar Exam on VATUSA Academy.
- b. Concepts Covered:

- i. Wake Turbulence
- ii. ATL Airport Turn Arounds
- iii. Blunders on the Finals
- iv. Go Arounds
- v. Class B Requirements
- vi. Opposite Direction Operations (ODO)
- vii. Outboard Runway/Approach Requirements/Separation
- viii. Pre-Arranged Coordination Areas
- ix. Runway Changes within the Final Boxes
- x. Scratchpad Entries
- xi. Transfer of Control / Communication Points
- xii. Hazardous Weather / Thunderstorm Plans
- xiii. Wake Remnant/Overtake Situations
- xiv. Potential Problem Areas
- c. Other Notes:
 - i. This is an introductory lesson designed to familiarize the students with the above concepts.

6-4-6. A80 Arrival Radar - AR 2 (A806)

- a. Prerequisites:
 - Completed A805.
- b. Concepts Covered:
 - i. All previous concepts.
- c. Other Notes:
 - i. This lesson is designed to verify the students ability to work the AR position.

6-4-7. A80 TAR and AR Combined (A807)

- a. Prerequisites:
 - i. Completed A806.
- b. Concepts Covered:
 - Best Practices for combined A80 operations.

6-4-8. A80 Combined - Monitoring (A808)

- a. Prerequisites:
 - Completed A807.
- b. Concepts Covered:
 - i. All previous concepts.
- c. Completion:
 - This session may result in full A80 Tier 1 Endorsment, at the discretion of the trainer.