

VATUSA Rating Guidelines

VERSION 1.0



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Purpose

The purpose of this document is to provide the Training Administrators of VATUSA a set of minimum standards to which each student within their ARTCC shall be trained too prior to receiving the rating in which they are seeking. This document corresponds to the set of global competencies as outlined in the VATSIM Global Ratings Policy v2.0, and should be utilized in compliance with the VATUSA Rating Standardization Policy.

Required Competencies

Student 1 (S1) Rating - Clearance Delivery / Ground (DEL/GND)

Below are the required competencies that must be met for a controller seeking the Student 1 (S1) rating. The controller should be competent in the areas listed below prior to issuing the promotion to Student 1 (S1).

I. General Control Procedures

- A. Pre-Control Setup and Configuration
 - i. Configuration of sector file and appropriate overlays
 - ii. Setup and selection of proper communications frequencies
 - iii. Selection and Activation of Controller Information
- B. Network Procedures
 - i. Uses appropriate callsign and credentials
 - ii. Selection of appropriate visibility range settings based on recommended settings for position
- C. Position Relief Briefing
 - i. If relieving a previous controller, properly conducts the position relief briefing to receive all critical information for the current traffic situation
 - ii. If no previous controller is online, student will explain the procedure he/she would use
- D. Coordination / Handoff Procedures
 - i. Coordinates with appropriate controllers as needed and hands off aircraft to adjacent positions when appropriate

II. Flight Plan Procedures

- A. Accessing Flight Strip Data
 - i. Properly accesses correct aircraft flight strip
- B. Flight Plan Amendments
 - i. Consistently evaluates flight paths for accuracy and applicability
 - ii. Properly corrects flight plan errors using appropriate key commands or user interface
 - iii. Exhibits appropriate coordination procedures as needed
- C. Preferred and Non-Standard Routing Procedures
 - i. In compliance with local procedures, attempts whenever possible to ensure the aircraft is on the correct preferred routing to its destination
 - ii. Provides preferred routing information for aircraft that do not have one filed
 - iii. Assists the pilot in identifying and providing the easiest departure for their aircraft capability

III. Clearance Delivery Procedures

- A. VFR and IFR Clearance Procedures
 - i. Demonstrates knowledge of difference between VFR and IFR clearances
 - ii. Demonstrates knowledge of proper VFR clearances.
- B. Squawk Code Assignments
 - i. In compliance with local procedures, attempts whenever possible to assign aircraft a preferred facility squawk code appropriate for the aircraft's type of flight
- C. Clearance Issuance
 - i. Issues clearance to aircraft in correct phraseology
 - ii. Ensures correct readback by aircraft before proceeding
- D. Departure Information
 - ii. In compliance with local procedures and regulatory documents, the controller will issue appropriate departure information (weather/runways in use/etc)

IV. Ground Control Procedures

- A. Movement and Non-Movement Areas
 - i. Demonstrates knowledge of difference between two areas
 - ii. Correctly identifies each area at the airport controlling
- B. Taxi and Ground Movement Operations
 - i. Correctly sequences aircraft to runway
 - ii. Demonstrates appropriate use of valid progressive taxi instructions
 - iii. Demonstrates use of correct phraseology
- C. Helicopter Taxi Operations
 - i. Understands difference between Air Taxi and Hover Taxi

- ii. Keeps aircraft clear of helicopter taxi path

V. Human Factors

A. Professionalism

- i. At all times while connected to the VATSIM network, the student will demonstrate a professional attitude towards the examining instructor and all members of the control team and staff

B. Appropriate Behavior

- i. The student understands the expected behavior while controlling and while observing and demonstrates this behavior at all times

C. Courteous Attitude

- i. The student shall at all times, regardless of situation or incident, maintain a courteous attitude towards all pilots and controllers

Student 2 (S2) Rating - Tower (TWR)

Below are the required competencies that must be met for a controller seeking the Student 2 (S2) rating. The controller should be competent in the areas listed below prior to issuing the promotion to Student 2 (S2).

I. General Control Procedures

- A. Pre-Control Setup and Configuration
 - i. Configuration of sector file and appropriate overlays
 - ii. Setup and selection of proper communications frequencies
 - iii. Selection and Activation of Controller Information
- B. Network Procedures
 - i. Uses appropriate callsign and credentials
 - ii. Selection of appropriate visibility range settings based on recommended settings for position
- C. Position Relief Briefing
 - i. If relieving a previous controller, properly conducts the position relief briefing to receive all critical information for the current traffic situation
 - ii. If no previous controller is online, student will explain the procedure he/she would use
- D. Coordination / Handoff Procedures
 - i. Coordinates with appropriate controllers as needed and hands off aircraft to adjacent positions when appropriate

II. Local Control Procedures

- A. Runway Selection
 - i. Selects appropriate runway based on current winds and local procedures
 - ii. In compliance with local procedures, the student shall attempt whenever possible to select as many runways possible to meet the current traffic volume
- B. ATIS Issuance
 - i. The student will demonstrate the ability to correct record a valid ATIS broadcast
 - ii. The student will advise all aircraft on the ground or within Tower airspace of current ATIS and ATIS updates
 - iii. The student will ensure all departing aircraft have the current ATIS information
- C. Departure Procedures
 - i. The student will demonstrate the ability to provide an aircraft with an appropriate departure release
 - ii. The student shall, in compliance with local procedure, provide aircraft with the appropriate departure heading for their route of flight
 - ii. The student will demonstrate knowledge of the appropriate regulations and procedures regarding helicopter departures

- D. Arrival Procedures
 - i. The student will demonstrate knowledge of the different types of landing modes used by aircraft and the appropriate phraseology to use for landing clearances (landing, low approach, touch-and-go, etc.)
 - ii. The student will demonstrate knowledge of the appropriate regulations and procedures regarding helicopter arrivals
- E. Spacing and Sequencing
 - i. In compliance with local procedures and adhering to regulated priority, the student shall whenever possible, ensure that spacing between arrivals and departures is appropriate to safely depart all awaiting aircraft and land all arriving aircraft as orderly and expeditiously as possible
- F. Taxi Into Position and Hold (TIPH) and Land and Hold Short (LAHSO)
 - i. The student shall at all times observe the regulations regarding each of these procedures as specified in FAA Order 7110.65
 - ii. Where applicable, the student shall demonstrate appropriate use of Taxi Into Position and Hold (TIPH) and Land and Hold Short (LAHSO)
- G. VFR Traffic Pattern
 - i. Understands and demonstrates knowledge of segments of the VFR Traffic Pattern
 - ii. Correctly issues appropriate instructions to VFR Aircraft utilizing the pattern
 - iii. Maintains proper sequencing and separation between all VFR Traffic in the pattern and all other arriving/departing traffic
- H. Wake Turbulence Separation
 - i. The student shall at all times remain in compliance of Wake Turbulence regulations as specified by FAA Order 7110.65 during ALL operations
 - ii. The student will demonstrate phraseology when providing Wake Turbulence advisories to all affected aircraft
- I. Converging or Parallel Runway Operations
 - i. When applicable, the student will provide advisories for aircraft arriving on parallel or converging runways
- J. Missed Approach Procedures
 - i. Understands missed approach procedures and go around operations
 - ii. In compliance with local procedures issues the appropriate missed approach instructions for the facility they are controlling
 - iii. When necessary the student will coordinate with the overlying radar controller for appropriate missed approach procedures

VI. Emergency Procedures

- A. Declaration of Emergencies
 - i. Understands all types of emergencies acceptable on VATSIM
 - ii. Understands and demonstrates knowledge of when an emergency has been declared
 - iii. Correctly identifies type of emergency when advised by aircraft

- B. Providing Emergency Assistance
 - i. Demonstrates appropriate procedures in providing assistance to emergency aircraft
 - ii. Takes appropriate and concise action to handle the emergency while maintaining control of all other aircraft

VII. Human Factors

- A. Professionalism
 - i. At all times while connected to the VATSIM network, the student will demonstrate a professional attitude towards the examining instructor and all members of the control team and staff
- B. Appropriate Behavior
 - i. The student understands the expected behavior while controlling and while observing and demonstrates this behavior at all times
- C. Courteous Attitude
 - i. The student shall at all times, regardless of situation or incident, maintain a courteous attitude towards all pilots and controllers

Student 3 (S3) Rating - TMA (APP/DEP)

Below are the required competencies that must be met for a controller seeking the Student 3 (S3) rating. The controller should be competent in all the areas listed below prior to issuing the promotion to Student 2 (S3).

I. General Control Procedures

- A. Pre-Control Setup and Configuration
 - i. Configuration of sector file and appropriate overlays
 - ii. Setup and selection of proper communications frequencies
 - iii. Selection and Activation of Controller Information
- B. Network Procedures
 - i. Uses appropriate callsign and credentials
 - ii. Selection of appropriate visibility range settings based on recommended settings for position
- C. Position Relief Briefing
 - i. If relieving a previous controller, properly conducts the position relief briefing to receive all critical information for the current traffic situation
 - ii. If no previous controller is online, student will explain the procedure he/she would use
- D. Coordination / Handoff Procedures
 - i. Coordinates with appropriate controllers as needed and hands off aircraft to adjacent positions when appropriate
- E. Provide VFR Traffic Advisories
 - i. The student shall whenever possible provide traffic advisories to IFR aircraft of VFR aircraft in the vicinity of their flight path.
- F. Provide Additional Services
 - i. Understands and Demonstrates knowledge of different types of additional service
 - ii. The student shall whenever possible provide additional services to aircraft requesting them
- G. Provide Clearance to In-flight Aircraft
 - i. Understands and Demonstrates knowledge of in-flight clearances
- H. Uncontrolled Airport Operations
 - i. Demonstrates knowledge and understanding of Uncontrolled Airport Operations
 - ii. The student shall, in compliance with all local procedures and regulatory documents, successfully issue instructions to aircraft arriving and departing from Uncontrolled Airports

II. General Radar Procedures

- A. Ensure Separation Requirements
 - i. In compliance with local policies and inter/intra-facility agreements, the student shall at all times ensure that positive separation is maintained between aircraft with at least the minimum separation requirements established by FAA Order 7110.65
 - ii. Understands the principles of wake turbulence
- B. Aircraft Vectoring
 - i. Understands knowledge of different types of vectoring
 - ii. Demonstrates ability to successfully vector an aircraft onto a pre-filed route or around traffic or weather
- C. Issuing Speed Control Instructions
 - i. Understands the regulations regarding speed instruction issuance and cancellation
 - ii. Determining appropriate speed for desired track
 - iii. Demonstrates ability to adjust speed to maintain desired separation
- D. Issuing Holding Instructions
 - i. Demonstrates knowledge and understanding of radar holding procedures including applicable phraseology and regulations
- E. VFR On Top
 - i. Demonstrates knowledge and understanding of VFR On Top Procedures
 - ii. The student shall, in compliance with all local procedures, identify the availability and properly issue using correct phraseology a VFR On Top clearance to the requesting aircraft

III. Radar Control Procedures

- A. Radar Tracking an Aircraft
 - i. Understands principle of radar tracking an aircraft target
 - ii. Correctly establishes track using appropriate key commands
- B. Radar Identifying an Aircraft
 - i. Understands difference between Radar Track and Radar Identifying
 - ii. Successfully radar identifies an aircraft with correct phraseology
- C. Aircraft Vectoring Procedures
 - i. The student shall, in compliance with all local procedures, vector the aircraft appropriately according to the filed standard departure
 - ii. Understands basics of non-standard departure vectoring
 - iii. In compliance with all local procedures, the student shall vector an aircraft to safely exit the departure area and to begin the en-route course with the most direct route
 - iv. The student shall, in compliance with all local procedures, vector the aircraft based on the filed standard terminal arrival route and to have the aircraft arrive the approach area safely and efficiently
 - v. Aircraft arriving other than on a standard terminal arrival route shall be vectored to join arriving traffic safely and expeditiously as to not congest the

arrival corridor

D. Pointout Procedures

- i. Understands the principles of a pointout
- ii. The student shall successfully complete a pointout with another controller which includes positive identification of the aircraft by the affected sector

E. Satellite Airport Operations

- i. The student shall, in compliance with local procedures and based on current traffic volume, provide service for all satellite airports located in his/her airspace.
- ii. Services for satellite airports include but are not limited to; IFR/VFR clearance, Takeoff/Landing Clearance, Departure and Approach Vectoring

IV. Instrument Approach Procedures

A. Precision Approach Procedures

- i. Understands and Demonstrates knowledge of types of approaches that fall under precision category
- ii. When vectoring to final approach course, vectors aircraft to join the final approach course at an appropriate altitude, distance from the Final Approach Fix, and intercept angle in compliance with local procedures and the 7110.65

B. Non-Precision Approach Procedures

- i. Understands and Demonstrates knowledge of the types of approaches that fall under non-precision category
- ii. When vectoring to final approach course, vectors aircraft to join the final approach course at an appropriate altitude, distance from Final Approach Fix, and intercept angle, in compliance with local procedures and the 7110.65

C. Clearance from Initial Approach Fix

- i. Demonstrates knowledge of methods to clear aircraft for an approach from an initial approach fix, and provides required instructions with correct phraseology before clearing for an approach
- ii. Understands methods of reaching initial approach fixes with and without vectors
- iii. Understands procedure turns and other methods of course reversal when used in conjunction with a clearance from Initial Approach Fix

D. Missed Approach Procedures

- i. The student shall demonstrate knowledge of the components of a missed approach, and provides missed approach instructions with correct phraseology
- ii. The student shall ascertain the desires of the aircraft and then provide appropriate services to that aircraft

E. Clearance to Alternate

- i. Determines most direct and available route from aircraft's present position to filed alternate airport
- ii. Provides aircraft correct clearance instruction using proper phraseology
- iii. Does not execute the alternate deviation until successful readback of the amended clearance is received

V. Emergency Procedures

- A. Declaration of Emergencies
 - i. Understands and demonstrates knowledge of when an emergency has been declared
 - ii. Takes appropriate and concise action to handle the emergency while maintaining control of all other aircraft
- B. Providing Emergency Assistance
 - i. In compliance with local procedures and based on current traffic volume, the student will make every effort to assist the pilot as necessary to ensure a safe outcome
- C. Understanding Emergency Effects on Traffic
 - i. Demonstrates understanding of potential effects of the emergency on other traffic in the airspace
 - ii. Correctly vectors as necessary, all other traffic to provide expeditious handling of the aircraft in distress

VI. Human Factors

- A. Professionalism
 - i. At all times while connected to the VATSIM network, the student will demonstrate a professional attitude towards the examining instructor and all members of the control team and staff
- B. Appropriate Behavior
 - i. The student understands the expected behavior while controlling and while observing and demonstrates this behavior at all times
- C. Courteous Attitude
 - i. The student shall at all times, regardless of situation or incident, maintain a courteous attitude towards all pilots and controllers
- D. Understanding Pilots
 - i. The student should demonstrate understanding for pilots with less advanced knowledge and skill and should treat them accordingly by not giving them confusing instructions or speaking too quickly
 - ii. The student should not become aggravated by a pilot who does not follow the instruction given correctly. Instead the student should work with the pilot to provide a successful outcome to the situation

Controller 1 (C1) Rating - En-Route (CTR)

Below are the required competencies that must be met for a controller seeking the Student 3 (S3) rating. The controller should be competent in all the areas listed below prior to issuing the promotion to Controller 1 (C1).

I. General Control Procedures

- A. Pre-Control Setup and Configuration
 - i. Configuration of sector file and appropriate overlays
 - ii. Setup and selection of proper communications frequencies
 - iii. Selection and Activation of Controller Information
- B. Network Procedures
 - i. Uses appropriate callsign and credentials
 - ii. Selection of appropriate visibility range settings based on recommended settings for position
- C. Position Relief Briefing
 - i. If relieving a previous controller, properly conducts the position relief briefing to receive all critical information for the current traffic situation
 - ii. If no previous controller is online, student will explain the procedure he/she would use
- D. Coordination / Handoff Procedures
 - i. Coordinates with appropriate controllers as needed and hands off aircraft to adjacent positions when appropriate
- E. Separation Standards
 - i. The student will at all times maintain appropriate separation between aircraft as outlined in the 7110.65 or local SOP/LOA
 - ii. The student will at all times separate aircraft from airspace not under their control as outlined in the 7110.65 or local SOP/LOA
- F. Special Flight Operations
 - i. Understands knowledge of types of special flight operations
- G. Weather Procedures
 - i. Demonstrates knowledge of weather effects on aircraft routing
 - ii. The student shall, in compliance with all local procedures, successfully accommodate aircraft deviations around weather to the requesting aircraft

II. En-Route Radar Operations

- A. Request for Altitude Change
 - i. Demonstrates knowledge and understanding of altitude change requests
 - ii. The student shall, in compliance with local procedures, determine the

availability and honor or decline the request for altitude change if requested by the pilot

iii.If the altitude change is required, student will inform the aircraft and ask for acceptance or alternative altitude that is acceptable

B. Successive Arrivals and Departures

i. Recognizes aircraft that are arriving or departing on the same route and/or at the same altitude

ii.The student shall, in compliance with all local procedures and inter/intra-facility agreements, separate the aircraft to approved separation minimums

C. Approach Control Saturation

i. Demonstrates understanding of Approach saturation

ii. The student shall, in compliance with all local procedures and after coordinating with Approach Control, determine the necessary action in order to relieve Approach Control airspace without creating further congestion in the students own airspace

D. Loss of Radar Contact

i. Recognizes Radar Contact loss

ii. Takes appropriate action to determine aircraft existence on network or total aircraft loss

ii.Pre pares for mid-flight aircraft reconnect and takes appropriate preemptive action to prevent a mid-air conflict

E. Route Change in Flight

i. If requested by the pilot, the student will determine the availability of the requested route. If route is not available, the student will provide an alternative route

ii.If route change is required, the student will, in compliance with all local procedures, coordinate with the pilot for acceptance of the amended route

iii.The student will provide a correct amendment issuance to the pilot and not execute the amended route in control until the aircraft has successfully read back the amended route

F. Pilot Deviations

i. Demonstrates reasons for pilot requested deviations

ii. Coordinates with pilots requesting deviations and provides as available and/or necessary

III.Coordination With Other Controllers

A. Request Control from Adjacent Sector

i. The student shall, in compliance with all local procedures and inter/intra-facility agreements, coordinate with adjacent sector controllers for aircraft control if necessary

B. Release Control to Adjacent Sector

i. The student shall, in compliance with all local procedures and inter/intra-facility agreements, coordinate with adjacent sector

controllers for release of aircraft control if necessary

IV. Application of Separation Rules

- A. Crossing, Converging, and Opposite Direction Traffic
 - i. Demonstrates knowledge and understanding of traffic situation
 - ii. Identifies crossing, converging or opposite direction traffic situation
- B. Overtaking Aircraft
 - i. Demonstrates knowledge and understanding of overtaking aircraft operations
 - ii. The student shall advise both aircraft of the situation and monitor until possible conflict is clear

V. Emergency Procedures

- A. Loss of Communication
 - i. Identifies positive communication loss with aircraft
 - ii. Takes appropriate measures to re-establish communication with aircraft using both voice and text protocols
 - iii. Plans vectors for traffic around the affected aircraft as to not create any possible conflicts with aircraft that is out of contact
 - iv. Takes appropriate action per VATSIM policy
- B. In-flight Emergencies
 - i. Understands different types of emergencies
 - ii. Demonstrates knowledge of accepted emergencies in VATSIM
 - iii. Takes appropriate action to coordinate with pilot and traffic in the vicinity of the aircraft in distress to provide a safe outcome to the situation
- C. Equipment Malfunctions
 - i. Understands different type of equipment malfunctions
 - ii. Demonstrates knowledge of equipment malfunction procedures and appropriate action
 - iii. Coordinates with pilots to continue to provide assistance
- D. Unexpected Aircraft Performance
 - i. Coordinates with pilot to determine performance issue and re-plans aircraft profile as necessary to maintain proper separation with traffic

VI. Human Factors

- A. Professionalism
 - i. At all times while connected to the VATSIM network, the student will demonstrate a professional attitude towards the examining instructor and all members of the control team and staff

- B. Appropriate Behavior
 - i. The student understands the expected behavior while controlling and while observing and demonstrates this behavior at all times
- C. Courteous Attitude
 - i. The student shall at all times, regardless of situation or incident, maintain a courteous attitude towards all pilots and controllers
- D. Understanding Pilots
 - i. The student should not become aggravated by a pilot who does not follow the instruction given correctly. Instead the student should work with the pilot to provide a successful outcome to the situation
- E. Providing New Pilot Help
 - i. The student shall, based on current traffic volume, provide assistance to new pilots who are confused with operation on the network or operation of their aircraft to perform the required maneuver as instructed by ATC