

Virtual Jacksonville **ARTCC**

CHS ATCT/TRACON Standard Operating Procedures



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This handbook establishes the Operating Procedures for Charleston Airport. This code applies equally to staff, controllers, and VATSIM members. This document is considered a supplement to any VATSIM and VATSIM United States (VATUSA) policies, procedures, and documents. This document cancels all previous publications and policies and remains in effect until canceled VATSIM, VATUSA, or a subsequent publication of the administrative policy. This document's updates and modifications are published after the appropriate approval process and announcement to the Virtual Jacksonville ARTCC. The ATM, DATM, or their designee(s) will complete all updates and changes to this document.

Michael J Burke

Michael J. Burke

Air Traffic Manager

Virtual Jacksonville ARTCC

Explanation of Changes

TABLE OF CONTENTS

DOCUMENT INFORMATION	2
Purpose	2
Distribution	2
Responsibility	2
Procedural Deviations	2
Updates and Changes	2
Cancellation	2
TABLE OF REVISIONS	3
TABLE OF CONTENTS	4
CHAPTER 1. OPERATIONAL POSITIONS	6
CHAPTER 2. CLEARANCE DELIVERY (CD)	7
2.1 Responsibilities	7
2.2 IFR Departure Instructions	7
2.2.1 IFR Altitudes	7
2.2.2 IFR Routing	7
2.2.3 Departure Frequency	8
2.2.4 Facility Beacon Codes	8
2.4 VFR Departure Instructions	9
CHAPTER 3. GROUND CONTROL (GC)	10
3.1 Area of Responsibilities	10
3.2 Pushback and Startups	10
3.3 Departures	10
3.4 Active Runway Operations	10
3.5 Runway Crossings	10
3.6 ATIS	10
3.7 Handoffs	10

CHAPTER 4. TOWER/LOCAL CONTROL (LC)	11
4.1 Area of Responsibility	11
4.2 Active Runway Selection	11
4.3 Runway Change Checklist	12
4.4 Departure Procedures	12
4.5 Arrival Procedures	12
4.6 Go Around/Missed Approach Procedure	13
4.7 Automatic Releases	13
4.8 Visual Tower	13
4.9 ATIS	13
4.10 Land and Hold Short (LAHSO) Procedures	13
CHAPTER 5. TRACON	15
5.1 Sector Table	15
5.2 Sectorization Description	15
5.3 Airspace Diagrams	16
5.4 Procedures	17
5.4.1 VFR Aircraft	17
5.4.2 Handoffs and Radar Tracking	17
5.4.3 Releases and Rolling Calls	17
5.4.4 Departure Procedures	18
5.4.5 Arrival Procedures	18

CHAPTER 1. OPERATIONAL POSITIONS

Table 1. CHS ATCT Operational Positions

Position	Radio Name	Callsign	Relief	Symbol	Frequency
Delivery	Charleston Clearance Delivery	CHS_DEL	1	8CD	127.325
Ground	Charleston Ground	CHS_GND	1	8CG	121.900
Tower	Charleston Tower	CHS_TWR	1	8CT	126.000

Table 2. CHS TRACON Operational Positions

Sector	Sector Name	Callsign	Relief	Symbol	Frequency
*WR	West Radar	CHS_W_APP	1W	8WR	120.700
ER	East Radar	CHS_E_APP	1E	8ER	119.300

Bold/asterisk* designates a primary position.

CHAPTER 2. CLEARANCE DELIVERY (CD)

2.1 Responsibilities

1. Issue ATC Clearances to all departing VFR and IFR aircraft.

2.2 IFR Departure Instructions

2.2.1 IFR Altitudes

1. If the aircraft is IFR and not conducting practice approaches, instruct the pilot to maintain 4,000.
2. If aircraft are conducting IFR practice approaches, instruct the pilot to maintain 2,000 feet.
3. All filed cruise altitudes must be checked for validity in accordance with our neighboring ARTCC LOAs and direction of travel.

2.2.2 IFR Routing

1. All aircraft shall be "*Cleared as filed*" unless a route amendment is necessary. If an amendment is necessary, however...
 - a. If an RNAV aircraft will transition to the southwest, aircraft shall be assigned the LGRHD# SID (pronounced "Loggerhead").
 - b. If an RNAV aircraft will transition to the northwest, aircraft shall be assigned the MLTRE# SID (pronounced "Moultrie [Mull Tree]").
 - c. If an RNAV aircraft will transition to the west, aircraft shall be assigned the STUNO# SID (pronounced "Stuno").
 - d. If an RNAV aircraft will transition to the northeast, aircraft shall be assigned the PLMTO# SID (pronounced "Palmetto").
 - e. If an RNAV aircraft will transition to the north, aircraft shall be assigned the SWPFX# SID (pronounced "Swamp Fox").
 - f. If an aircraft is non-RNAV, aircraft shall be cleared via radar vectors to their first filed/cleared fix.
2. All routes must comply with LOA-approved standards between facilities.
 - a. Aircraft unable to accept LOA-approved routes must not be cleared until coordination has occurred between all affected facilities to the maximum extent possible.

2.2.3 Departure Frequency

1. Table 3 describes the appropriate departure frequency for direction of travel.

Table 3. Departure Frequency Assignment

Departure Direction	SID	Departure Position (Frequency)
155-335	LGRHD#, STUNO#	W (120.700)
336-154	MLTRE#, PLMTO#, SWPFX#	E (119.300)

2.2.4 Facility Beacon Codes

1. All departing aircraft shall be assigned a unique beacon code in compliance with Table 4.

Table 4. CHS ATCT Beacon Codes

Departure Flight Rules	Beacon Range (Low-High)
IFR	7301-7337
VFR	7301-7337

2.4 VFR Departure Instructions

1. If aircraft are not remaining in the pattern, issue the instruction *"Maintain VFR at or below 3,500"*.
2. VFR aircraft not remaining within the pattern shall be given a departure frequency and assigned a unique VFR beacon code in compliance with Table 4.. Departure frequencies shall be determined by Table 3.
3. VFR aircraft remaining in the pattern shall be expected to squawk VFR (1200).

CHAPTER 3. GROUND CONTROL (GC)

3.1 Area of Responsibilities

1. GC has control of all movement areas excluding the designated active runway(s).

3.2 Pushback and Startups

1. GC does not authorize pushbacks or startups unless the aircraft pushing back will enter a movement area during pushback.
 - a. In these instances, aircraft should be instructed *"Push and start approved, push tail facing (direction)."* The direction should keep the aircraft pointed in the direction the aircraft will taxi.
 - b. If the pilot calls to push, and no controlled area will be penetrated, simply advise the pilot *"Push and start at pilot's discretion."*

3.3 Departures

1. GC must notify and receive approval from LC of all intersection departures verbally or through the chatbox.
2. GC shall ensure pilots have the current ATIS prior to the aircraft being handed off to LC.

3.4 Active Runway Operations

1. Except for runway crossings, GC must transfer communications to LC if an aircraft is to operate on an active runway.

3.5 Runway Crossings

1. All active runway crossings must be approved verbally or through the chat box by LC.

3.7 Handoffs

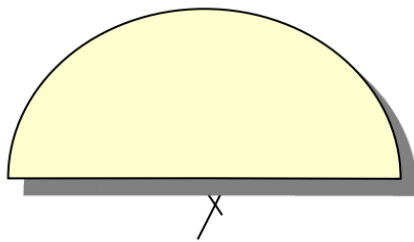
1. GC shall instruct aircraft to *"Contact Charleston Tower 126.000"* unless otherwise agreed upon by LC.

CHAPTER 4. TOWER/LOCAL CONTROL (LC)

4.1 Area of Responsibility

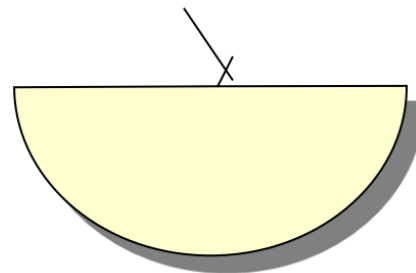
- LC is responsible for providing air traffic control services on all active runways. LC is also responsible for the CHS Local Control Departure Area (see Figure 1).

Figure 1. CHS LC Departure Area



NORTH OPERATION

RWY 33/3 (NORTH) - from the 270 radial to the 090 radial clockwise out to 5 Miles. Surface to 4000'.



SOUTH OPERATION

RWY 15/21 (SOUTH) - from the 270 radial to the 090 radial counter-clockwise out to 5 Miles Surface to 4000'.

4.2 Active Runway Selection

- The standard runway configurations at CHS are:
 - North Operations
 - Arriving: Runway 33
 - Departing: Runway 3
 - South Operations
 - Arriving: Runway 15
 - Departing: Runway 21
- North operations shall be the calm wind and preferred configuration when the tailwind component is less than five knots.
- Occasionally, operational factors may require a shift to Runway 15 and 3 or Runway 33 and 21. These are non-standard configurations and must be coordinated with the TRACON.

4.3 Runway Change Checklist

1. When changing runways, LC must verbally coordinate with the appropriate TRACON position(s) for the last departure/arrival off the previously used runway and the first departure/arrival off the newly selected active runway(s).
2. Notify TRACON of the new runway configuration and last departure and arrivals.
3. When notified by TRACON, stop all departures on the present configuration.
4. Notify GC of the new runway configurations and divert all departures to the new runways.
5. When TRACON is ready for the new configuration, TRACON will notify LC. Upon completion of notification, departures may resume with the new configuration.
6. Ensure ATIS has been updated to reflect the new configuration.

4.4 Departure Procedures

1. LC will provide separation for aircraft in the LC airspace.
2. LC shall provide initial separation between successive departures.
3. When automatic departures are in effect, departures shall be released on a fanned heading that will conform to the applicable departure corridor, climbing to an appropriate altitude, as assigned in Section 2.2.1.

4.5 Arrival Procedures

1. LC shall be responsible for separation of all arrival aircraft that are established on final and have been transitioned from TRACON from all departing aircraft still under LC jurisdiction.
2. Communication transfer must be completed prior to five nautical miles from the runway.
3. Practice Instrument Approach instructions will be given by approach control and coordinated with LC.
4. LC shall NOT change the approach sequence without coordination.

4.6 Go Around/Missed Approach Procedure

1. LC shall assign IFR aircraft runway heading and 2,000 feet.
2. LC must verbally coordinate with departure prior to frequency change.

4.7 Automatic Releases

1. LC is authorized automatic releases from the TRACON controller so long as the aircraft departs on the pre-coordinated active departing runway(s) following standard departure procedures.
2. In order for automatic releases to be authorized, procedures in Section 4.4 and 4.5 of this document shall be followed.
3. Departure releases must be obtained if automatic releases are suspended by TRACON.

4.8 Visual Tower

1. Charleston ATCT is a visual/VFR tower and shall not initiate or accept any radar handoffs and shall not initiate control/start track on any target.

4.9 ATIS

1. LC shall manage the ATIS for KCHS.

4.10 Land and Hold Short (LAHSO) Procedures

1. LAHSO operations are authorized at CHS.
2. During LAHSO operations, if requested by the pilot, issue the following available distances for CHS.
 - a. "Runway 15, available landing distance 5,700 feet."
 - b. "Runway 21, available landing distance 900 feet."
 - c. "Runway 33, available landing distance 2,900 feet."
 - d. "Runway 03, available landing distance 5,500 feet."

CHAPTER 5. TRACON

5.1 Sector Table

- Below is the sector table for the CHS TRACON.
- Bold/asterisk** indicates the sectors used when CHS TRACON is in the “combined” configuration.

Table 7. CHS TRACON Sectors

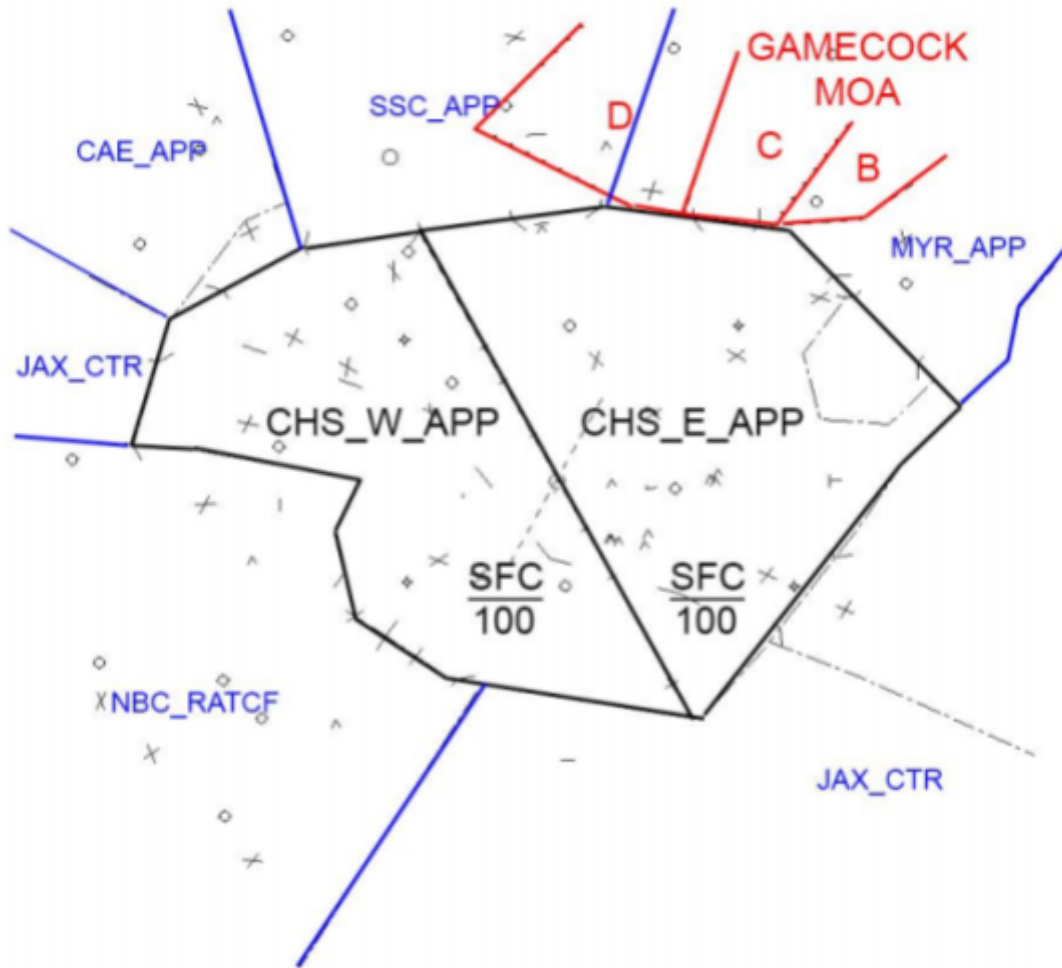
Sector	Sector Name	Callsign	Relief	Symbol	Frequency
*WR	West Radar	CHS_W_APP	1W	W	120.700
ER	East Radar	CHS_E_APP	1E	E	119.300

5.2 Sectorization Description

- The primary “combined” radar position shall be **WR**. No other sectors shall be staffed until the “combined” position is already in use.
- Once **WR** is in use, **WR** may delegate a portion of its airspace to **ER**.
- Unless otherwise coordinated, **WR** and **ER** are responsible for areas depicted in Section 5.3.
- WR** and **ER** provide overflight services and approach sequence to aircraft landing in the Charleston ATCT airspace.
- WR** area of jurisdiction is the CHS approach control airspace west of the Runway 15/33 extended centerline, surface up to 10,000’ MSL (see Section 5.3). **WR** is responsible for departure control for westbound traffic.
- ER** area of jurisdiction is the CHS approach control airspace east of the Runway 15/33 extended centerline, surface up to 10,000’ MSL (see Section 5.3). **ER** is responsible for departure control for eastbound traffic.

5.3 Airspace Diagrams

Figure 1. CHS TRACON and Adjoining Airspaces



5.4 Procedures

5.4.1 VFR Aircraft

1. VFR aircraft entering the Class Charlie airspace will be given a discrete beacon code.
2. If an aircraft departs from CHS and does not request a flight following, the aircraft will be handed off from LC to TRACON and released to the advisory frequency once clear of the Class C.

5.4.2 Handoffs and Radar Tracking

1. Charleston ATCT is a VFR tower. No radar handoffs shall be initiated to LC. Inbound notification of aircraft shall be delivered via a pointout.
2. TRACON controllers shall not drop track on any arriving aircraft. This allows a controller to maintain radar identification during missed approach.

5.4.3 Releases and Rolling Calls

1. TRACON sectors give automatic releases to all departures from Charleston ATCT when departures follow the standard departure procedures as specified in this document.
2. All other airports within TRACON's boundaries shall request a departure release. Upon approval of the release, the release shall be good for five minutes.
3. Upon issuance of the takeoff clearance, a departure message shall be sent to the appropriate departure sector. This can be accomplished non-verbally by the LC ensuring the aircraft is squawking the appropriate squawk code and mode C is enabled when airborne.

5.4.4 Departure Procedures

1. Forward departure instructions to LC for aircraft executing practice missed approaches.
2. Ensure all departures are on course as soon as practical.
3. All departures should be on course before handoff to Enroute Control unless otherwise coordinated. Aircraft shall be climbed to 10,000 or less if filed.
4. Provide airspace for automatic departures and radar final.
5. Provide airspace for missed approach on all runways.

5.4.5 Arrival Procedures

1. The sector coordinated to be responsible for the primary runway shall establish the approach sequence for all arrivals.
2. Communication transfer of arriving aircraft to LC must be accomplished prior to five nautical miles from the end of the arrival runway.
3. When simultaneous approaches are being conducted on converging runways, LC is responsible for ensuring runway separation. However, TRACON must provide enough spacing to minimize the possibility of a go-around.
4. When vectoring to final from parallel downwinds, aircraft on opposing base legs shall be assigned altitudes to ensure vertical separation unless other approved separation has been applied. This ensures separation in the event of an overshoot on final.
5. Coordinate with LC for any aircraft conducting approaches to other runways than the active arrival runway(s) in use.