

# Virtual Jacksonville **ARTCC**

## **JAX ATCT/TRACON** **Standard Operating Procedures**



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## DOCUMENT INFORMATION

This handbook establishes the procedures for controlling the JAX ATCT and TRACON. 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.

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## TABLE OF REVISIONS

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08/26/2014	Initial Release	N/A
08/18/2019	Template Revision, S TRACON Frequency Change, Departure Heading Revision, JAX# SID Assignment Revision	Peter Shivery/ ZJX-2.A
07/01/2020	Removal of TRACON scratchpad and temporary altitude sections. Removal of pattern altitude instructions for VFR aircraft	Peter Shivery/ ZJX-2.B
01/01/2021	Updated Sectorization of JAX TRACON; Update of Departure IFR Departure Headings	Maxine Grooms/ ZJX-2.C
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## CHAPTER 1. OPERATIONAL POSITIONS

**Table 1. JAX ATCT Operational Positions**

Position	Radio Name	Callsign	Relief	Symbol	Frequency
Delivery	Jacksonville Clearance Delivery	JAX_DEL	1	3JD	119.500
Ground	Jacksonville Ground	JAX_GND	1	3JG	121.900
Tower	Jacksonville Tower	JAX_TWR	1	3JT	118.300

**Table 2. JAX TRACON Operational Positions**

Sector	Sector Name	Callsign	Relief	Symbol	Frequency
<b>N*</b>	<b>North</b>	<b>JAX_N_APP</b>	<b>1N</b>	<b>3N</b>	<b>127.000</b>
W	West	JAX_W_APP	1W	3W	127.775
E	East	JAX_E_APP	1E	3E	132.775
R	Arrival	JAX_R_APP	1R	3R	119.000
J	Final	JAX_J_APP	1J	3J	119.850
S	Satellite	JAX_S_APP	1S	3S	120.750
V	Vitts	JAX_V_APP	1V	3V	118.600

**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. Instruct all pilots to maintain 3,000 feet and to expect filed cruise altitude (if higher) ten minutes after departure.
2. All filed cruise altitudes must be checked for validity in accordance with our neighboring ARTCC LOAs and direction of travel.
3. ATL/PDK bound traffic should be filed at an **odd** altitude AOB FL310.

#### 2.2.2 IFR Routing

1. All aircraft not filing a SID, with a filed cruise altitude of 10,000 feet or above, shall be assigned the JAX# departure.
2. All aircraft not filing a SID, with a filed cruise altitude below 10,000 feet, shall be assigned radar vectors to their first filed fix.
3. All routes must be checked for compliance with neighboring ARTCC LOAs. Aircraft who do not file these routes should have them amended appropriately.
  - a. Aircraft unable to accept preferred routes must not be cleared until coordination has occurred between affected/staffed facilities.
4. KJAX RNAV Departures are **Turbojet Only Departures**. Ensure that all non turbojet aircraft are on appropriate SIDs and STARs.



### 2.2.3 Departure Frequency

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

**Table 3. Departure Frequency Assignment**

Direction	SID	Departure Position (Frequency)
N, NE	CROSB#, JAX#	N (127.000)
E	JAX#	E (132.775)
SE, S, SW	EXBOX#, SAWGY#, JAX#	E (132.775)
NW	ARNEY#, JAX#	N (127.000)
W	JETIN#, JAX#	N (127.000)
SW	JETIN.JAYJA (WEST OPS ONLY)	W (127.775)

### 2.2.4 Facility Beacon Codes

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

**Table 4. JAX ATCT Beacon Codes**

Departure Flight Rules	Beacon Range (Low-High)
IFR	2601-2677
VFR	2601-2677

## 2.3 VFR Departure Instructions

1. VFR Altitudes
  - a. If aircraft are not remaining in the pattern, issue the instruction *“Maintain VFR at or below 3,000 feet.”*
2. VFR aircraft not remaining within the pattern shall be given a departure frequency. Departure frequencies shall be determined by Table 3.
3. Assign all non-pattern VFR aircraft a unique VFR beacon code in compliance with Table 4.

## 2.4 Scratchpads

1. To assist TRACON controllers, CD shall input appropriate scratchpad entries into the flight plan, as outlined in Table 5, after the clearance has been issued.

**Table 5. Jacksonville Scratchpad Entries**

SID/Type of Flight	Scratchpad Entry
ARNEY#	ARN
CROSB#	CRO
EXBOX#	EXB
JAX#	JAX
JETIN#	JET
SAWGY#	SAW
VFR No Flight Following	N/A
VFR Flight Following	VFF

## CHAPTER 3. GROUND CONTROL (GC)

### 3.1 Area of Responsibilities

1. GC has control of all movement areas except the active runway.

### 3.2 Pushback and Startups

1. GC does not authorize pushbacks or startups unless the aircraft pushing back will enter a controlled 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 Intersection Departures

1. GC must advise LC of all intersection departures verbally or through the chatbox.

### 3.4 ATIS

1. GC shall ensure pilots have the current ATIS prior to the aircraft being handed off to LC.

### 3.5 Active Runway Operations

1. GC will control all aircraft taxiing/proceeding across an active runway.
2. All active runway crossings must be approved verbally or through the chat box by LC.

### 3.6 Handoffs

1. GC shall instruct aircraft to *“Contact Jacksonville Tower (frequency)”* unless otherwise agreed upon by LC.

## CHAPTER 4. TOWER/LOCAL CONTROL (LC)

### 4.1 Area of Responsibility

1. LC has responsibility for a five mile radius from the JAX field from surface up to and including 3,000 MSL.

### 4.2 Active Runway Selection

1. JAX runway use program utilizes East Operations (Runway 8 and Runway 14) when the wind component is less than 10 knots.
2. In East Operations, Runway 8 shall be used for arrivals and Runway 14 shall be used for departures except for heavy departures.
3. In West Operations, Runway 26 shall be used for arrivals and Runway 32 shall be used for departures except for heavy departures.

### 4.3 Runway Change Checklist

1. When changing runways, LC must verbally coordinate with the appropriate TRACON position(s).
  - a. LC shall be responsible for coordinating the last departure off the previously used runway and the first departure off the newly selected active runway(s).
  - b. TRACON shall be responsible for coordinating the last arrival on the previously used runway and the first arrival on the newly selected active runway.
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 initial separation for aircraft in the LC airspace.
2. LC shall provide initial separation between successive departures.
3. When automatic departures are in effect, IFR departures may be released on a heading in compliance with Section 4.5, climbing to 3,000 feet. Aircraft shall be assigned a departure heading towards the receiving TRACON sector's (**N**, **E**, or **W**) airspace.
4. When automatic releases are in effect, VFR departures may be released on a heading in compliance with Section 4.5, climbing at or below 3,000 feet. Aircraft shall be assigned a departure heading towards the receiving TRACON sector's (**N**, **E**, or **W**) airspace.
5. TRACON has control for turns leaving the departure portion of the tower operations area.

## 4.5 Departure Headings

### 4.5.1 Standard Turbojet Departure Headings

1. Assign a standard departure heading to IFR turbojet departures, as outlined in Table 6, based on an aircraft's direction of travel. During times of heavy traffic, headings depicted on Figure 1 may be used at Local Controller's discretion.

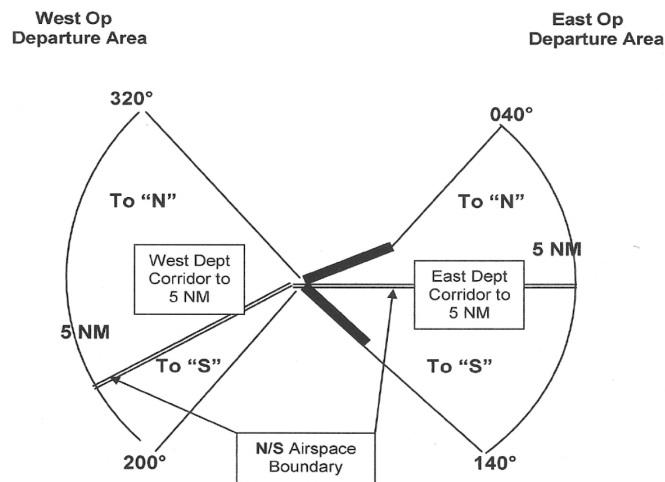
**Table 6. Standard TURBOJET Departure Headings**

	To "S" TRACON Sector	To "N" TRACON Sector
East Operations Runway 8/14	140°	Runway 8: 080° Runway 14: 100°
West Operations Runway 26/32	220°	320° (260° for west and southwest departures)

### 4.5.2 Standard PROP Departure Headings

1. Assign an alternate departure heading as depicted in Figure 1 to achieve separation between IFR prop departures

**Figure 1. Standard Departure Headings**



## 4.6 Arrival Procedures

1. LC shall be responsible for separation of all arrival aircraft that have been handed off by TRACON from all departing aircraft still under LC jurisdiction.
2. Communication transfer must be completed prior to five nautical miles from the runway.
3. LC shall not change the approach sequence without coordination with TRACON.

## 4.7 Practice Approach Procedure

1. Practice approach climb-out instructions will be given by TRACON.
2. A heading of 360° degrees and 2,000 feet will be given to aircraft conducting multiple approaches.
3. Upon completion and leaving the multiple approach pattern, standard departure heading and an altitude of 3,000 feet will then be assigned.
4. All aircraft conducting practice approaches will be handed to **J**.

## 4.8 Go Around/Missed Approach Procedure

1. Missed approach procedure depends on the operations of JAX.
  - a. If East Operations, LC shall assign 070° and 2,000 feet.
  - b. If West Operations, LC shall assign 320° and 2,000 feet.
2. LC must coordinate with TRACON verbally or via the chat box prior to a frequency change.
3. Aircraft will be handed off to appropriate departure controller (**N, E, or W**)

## 4.9 VFR Pattern

1. The VFR pattern will be at or below 1,500 feet.
2. Runway 8 and 32 will utilize left hand pattern. Runway 14 and 26 will utilize right hand pattern.

## 4.10 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) on approved departure headings in Section 4.5.

2. In order for automatic releases to be authorized, procedures in Section 4.4 and 4.6 of this document shall be followed.
3. Departure releases must be obtained if automatic releases are suspended by TRACON.

## **4.11 Visual Tower**

1. Jacksonville 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.

## **4.12 ATIS**

1. LC shall manage the ATIS for KJAX.



## CHAPTER 5. TRACON

### 5.1 Sector Table

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

**Table 7. JAX TRACON Sectors**

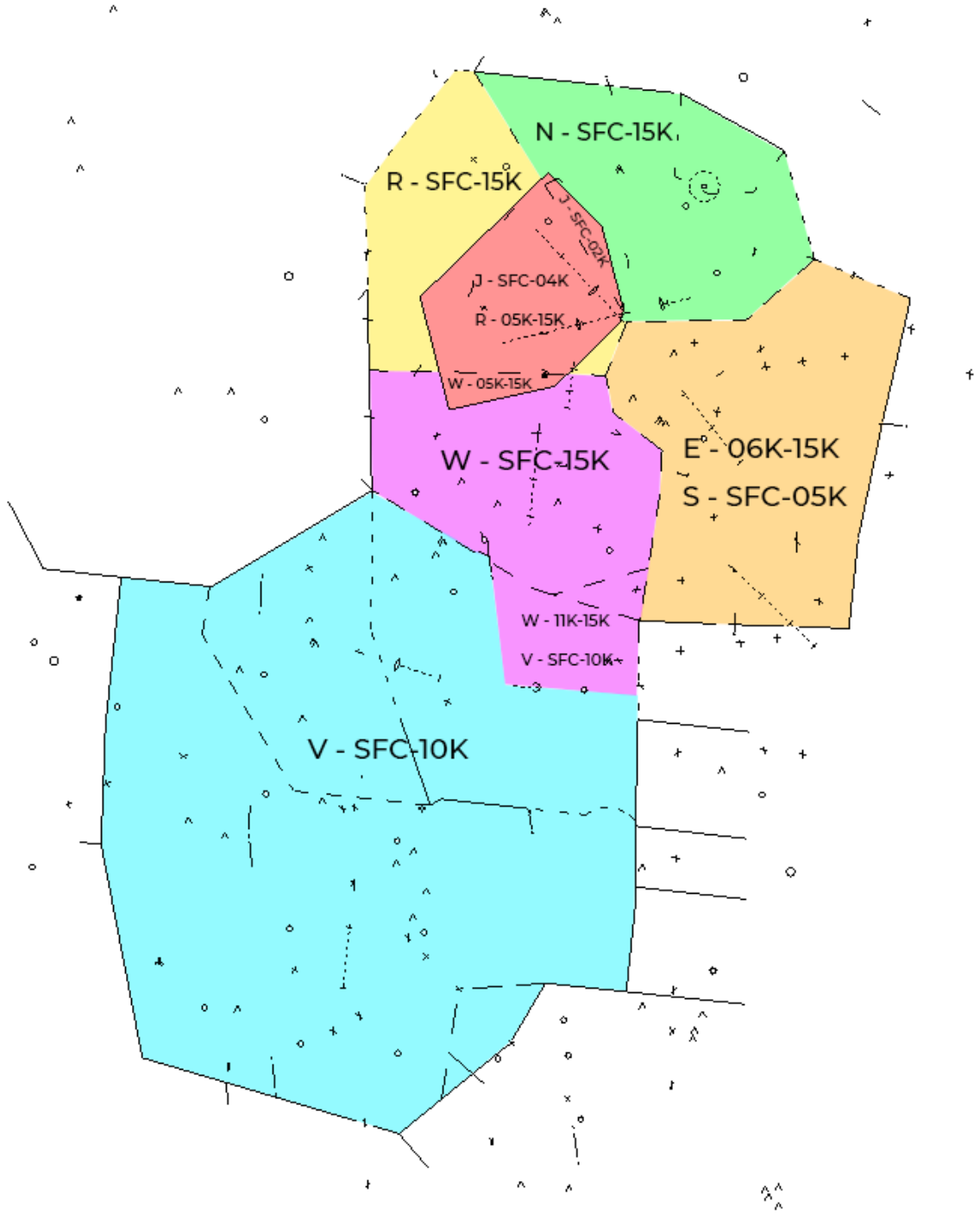
Sector	Sector Name	Callsign	Relief	Symbol	Frequency
<b>N*</b>	<b>North</b>	<b>JAX_N_APP</b>	<b>1N</b>	<b>3N</b>	<b>127.000</b>
W	West	JAX_W_APP	1W	3W	127.775
E	East	JAX_E_APP	1E	3E	132.775
R	Arrival	JAX_R_APP	1R	3R	119.000
J	Final	JAX_J_APP	1J	3J	119.850
S	Satellite	JAX_S_APP	1S	3S	120.750
V	Vitts	JAX_V_APP	1V	3V	118.600

### 5.3 Sectorization Description

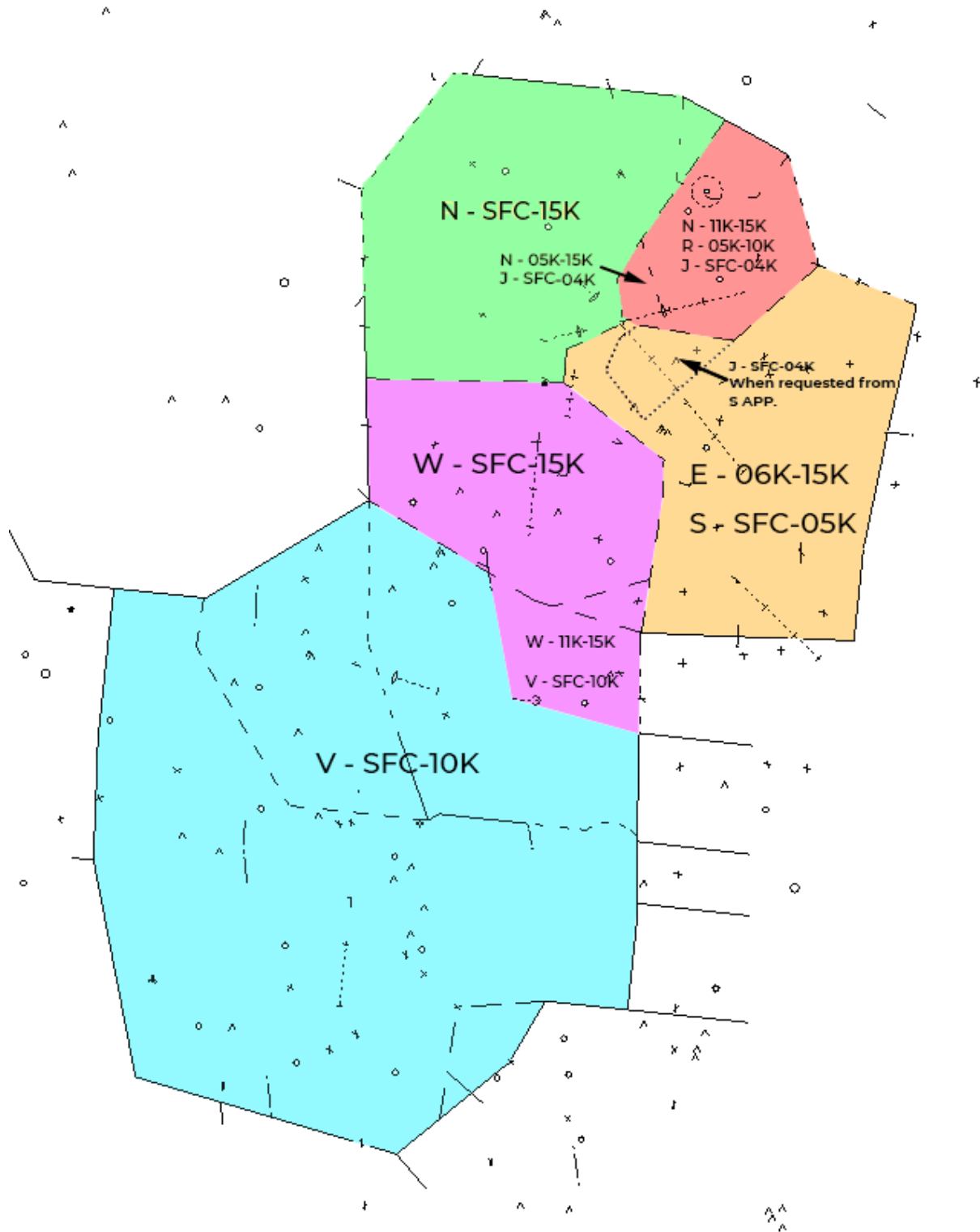
- The primary “combined” radar position shall be **N**. No other sectors shall be staffed until the “combined” position is already in use.
- Once **N** is in use, **N** may delegate a portion of its airspace to **W, E, R, J, S,** or **V** depending on traffic volume in each sector.
- Unless otherwise coordinated, areas of jurisdiction for the **N, W, E, R, J, S,** and **V** sectors are depicted in Section 5.4.

## 5.4 Airspace Diagrams

### 5.4.1 Jacksonville TRACON, East Operations



### 5.4.2 Jacksonville TRACON, West Operations



## 5.5 General Procedures

### 5.5.1 VFR Aircraft

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

### 5.5.2 Handoffs and Radar Tracking

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

### 5.5.3 Releases and Rolling Calls

1. TRACON sectors give automatic releases to all departures from Jacksonville ATCT when departures follow the standard departure procedures as specified in this document.
2. All other airports within TRACON's boundaries shall request a release for all departures. 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 code and mode C is enabled when airborne.

### 5.5.4 Departure Procedures

1. During East Flow, Turbojets that are west or southwest bound should be vectored counterclockwise north of KJAX.
2. During West Flow, Turbojets that are northeast bound should be vectored clockwise north of KJAX.
3. Ensure departures are on course as soon as practical and climbing to the top of airspace before handoff to ZJX En Route unless otherwise coordinated.
4. Aircraft shall be climbed to 15,000 feet or their cruise altitude, whichever is lower in sectors **N,R,E**, and **W**.
5. Forward departure instructions to LC for aircraft executing practice missed approaches.
6. Provide airspace for automatic departures and radar final.
7. Provide airspace for missed approach on all runways.

### 5.5.5 Arrival Procedures

1. Communication transfer of arriving aircraft to LC must be accomplished no later than five nautical miles from the end of the arrival runway.
2. 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.
3. Coordinate with LC for any aircraft conducting approaches to other runways than the active arrival runway(s) in use.

## 5.6 Sector Procedures

### 5.6.1 North (N) Area

1. Responsibilities
  - a. Provide overflight services and initial approach sequence to aircraft landing in the Jacksonville ATCT airspace. This includes the LUNNI# STAR in east flow and the LUNNI#, OHDEA#, MARQO# and AMG# STARS in west flow.
2. Departure Procedures
  - a. East Flow
    - i. Responsible for aircraft on the ARNEY# and CROSBY# SID, and other non-RVAV NW and NE bound departures.
    - ii. If on the JETIN# SID or westbound on the JAX# SID, aircraft shall be transferred as soon as practical to **R** if online.
  - b. West Flow
    - i. Responsible for aircraft on the ARNEY# , CROSBY# and JETIN#.CAPPS SID, and other non-RVAV NW and NE bound departures.

### 5.6.2 Arrival (R) Area

3. Responsibilities
  - a. Provide overflight services and initial approach sequence to aircraft landing in the Jacksonville ATCT airspace. This includes the MARQO#, OHDEA#, AMG# in east flow and LUNNI# STAR after transfer from **N** in west flow.
4. Departure Procedures
  - a. Responsible for aircraft on the JETIN#.CAPPS SID, the JETIN#.JAYJA SID during east flow, and other non-RVAV west bound departures after transfer from **N**.

### 5.6.3 East (E) Area

1. Responsibilities
  - a. Provide overflight services and approach sequence to airports landing in the Jacksonville ATCT airspace. This includes the HOTAR# STAR and primarily satellite field arrivals.
2. Departure Procedures
  - a. **E** has authorization for airspace penetration with **S** for southern departures from JAX for climbs and turns. **E** assumes

responsibility for separation from other traffic and must not interfere with **S** operations. This sector is responsible for the SAWGY# and EXBOX# SIDs.

3. Arrival Procedures
  - a. **J** has control for turns and descent at or below 5,000 feet and within 10 miles of **E** airspace.
  - b. **E** shall provide final approaches to JAX for Runway 32 when **J** is not staffed.

#### 5.6.4 West (W) Area

5. Responsibilities
  - a. Provide overflight services and approach sequence to aircraft landing in the Jacksonville ATCT airspace. This includes the TEBOW# STAR.
6. Departure Procedures
  - a. Responsible for aircraft on the JETTIN#.JAYJA during west flow.
  - b. **W** is also responsible for arrival/departures from VQQ, and responsible for conducting arrivals into NIP when NIP is east, as well as departures when NIP is west.

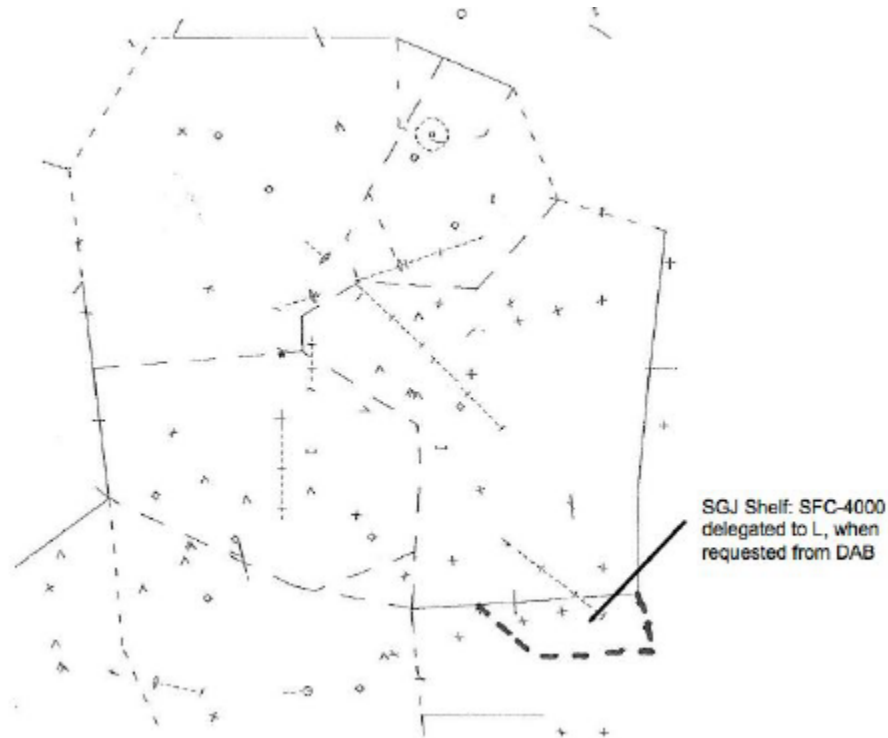
#### 5.6.5 Final (J) Sector

1. Responsibilities
  - a. **J** shall provide overflight service, arrival sequence, and departure sequence to airports within **J**'s airspace.
2. Arrival Procedures
  - a. **J** shall retain responsibility for separation between successive instrument approaches.
  - b. **J** has control for turns and descent of aircraft at or below 5,000 feet and within 10 miles of **J** airspace when handed off adjacent sectors.
  - c. When JAX is in west operations, **J** may coordinate with **E** for the "32 final" airspace as depicted in Figure 4.

## 5.6.6 Satellite (S) Sector

1. Responsibilities
  - a. **S** is a low-level arrival sector for CRG, NRB, and SGJ.
  - b. **S** shall provide overflight service, arrival sequence, and departure sequence to airports within **S**'s airspace.
2. Departure Procedures
  - a. **S** serves as the initial departure controller for all airports within its boundaries except for JAX.
  - b. Ensure all departures are on course as soon as practical.
  - c. Aircraft shall be climbed to 5,000 or less (if filed) and handed off to the appropriate sector.
  - d. The JAX final and departure corridors shall be protected from northbound departures from **S**. Traffic should be routed around or above the final and departure corridors.
  - e. For departures from JAX, **S** has authorization for airspace penetration for climbs and turns. **S** assumes responsibilities for separation, but **S** maintains responsibility for issuing appropriate traffic information.
  - f. **S** is responsible for conducting departures from NIP when NIP is in east operation.
3. Arrival Procedures
  - a. During JAX west operations, **S** is responsible for sequencing arrivals to Runway 32 unless the "32 Final" has been released to **S**.
  - b. The St. Augustine Shelf Airspace (Figure 5) may be activated when necessary due to traffic. Coordinate with DAB\_APP or JAX\_CTR for use of this shelf airspace.
  - c. **S** is responsible for conducting approaches into NIP when NIP is in west operation.



**Figure 5. St. Augustine Shelf Airspace**

### 5.6.5 Vitts (V) Sector

1. Responsibilities
  - a. **V** is a low level arrival sector for GNV, and OCF.
  - b. **V** shall provide overflight service, arrival sequence, and departure sequence to airports within **V**'s airspace.
2. Departure Procedures
  - a. **V** serves as the initial departure controller for all airports within its boundaries.
  - b. Ensure all departures are on course as soon as practical.
  - c. Aircraft shall be climbed to 10,000 feet or less (if filed) and handed off to the next appropriate sector.