

***ZTL ARTCC***

**Atlanta Center**

**Air Route Traffic Control Center**

**Standard Operating Procedures**

**ZTL 7110.65D**

**Effective: July 1, 2011**

# **Chapter 1: GENERAL**

## **1.1 MONITORING ALTIMETER AND LOWEST USABLE FLIGHT LEVEL**

- a. An altimeter reporting station is associated with each sector to provide for Mode C correction.
- b. Mode C correction altimeter stations are: CSV, TYS, CHA, ATL, HSV, BNA, ROA, TRI, GSO, CLT, GSP, AGS, AVL, CAE, MCN, CSG, MGM, BHM, MOB and AHN.

## **1.2 EN ROUTE MINIMUM IFR SECTOR CHARTS**

Do not clear/vector aircraft below the MIA unless the flights are operating along airways, transition routes, or off airway routes that have lower Minimum En Route Altitudes established. This restriction does not include aircraft on initial departure clearances, such situations being addressed elsewhere.

## **1.3 PRACTICE INSTRUMENT APPROACHES**

All participating aircraft practicing instrument approaches to the following airports: Hickory Municipal Airport (HKY) Hickory, NC shall be handled per the FAA 7110.65, Practice Approaches.

## **1.4 HANDLING VFR AIRCRAFT RECEIVING RADAR ADVISORY SERVICE**

- a. Aircraft receiving RAV (Radar Advisory Service) shall be handed off to subsequent sectors/facilities. If a handoff is not accepted prior to the approach control boundary, terminate radar service and advise the aircraft to squawk VFR and remain clear of the Class B airspace. You may advise the aircraft of the appropriate frequency to request additional RAV service.
- b. Phraseology: “(AID) radar service terminated (Position) squawk VFR, remain outside of (Atlanta/Charlotte) Class B airspace, frequency change approved.”

## **1.5 VECTORING TO INTERCEPT DEPICTED FINAL APPROACH COURSE**

- a. The depictions of final approach courses have been designed to provide adequate space for the aircraft to descend within prescribed guidelines from the Minimum IFR Altitude (MIA) to the Final Approach Fix (FAF) altitude.
- b. Vectoring an aircraft at or above the MIA to intercept closer to the airport than the depicted arrowheads may jeopardize the pilot’s ability to descend to cross the FAF at the appropriate altitude.
- c. ZTL controllers shall not vector aircraft to intercept final approach course depictions at any point closer to the airport than the depicted 30 degree arrowheads on the display.

NOTE - Controllers may elect to use the appropriate TRACON MVA/final approach courses when vectoring for an instrument approach.

## **1.6 WAIVER OF COMPUTER ENTRY OF ASSIGNED ALTITUDE**

The following sectors are exempt from the computer entry of interim altitudes for Atlanta Terminal Area and Charlotte Douglas International Airport departures with Mode C readout, requesting FL240 and above.

a. Atlanta Terminal Area Departures.

- 1) Dalas when initiating handoff to Rocket.
- 2) Sinca when initiating handoff to Charlotte.
- 3) Tiroe when initiating handoff to LaGrange.

b. Charlotte Douglas International Airport Departures. Sinca Sector when initiating handoff to ZDC ARTCC.

c. The controller shall update the interim altitude to reflect the actual assigned altitude of the aircraft in order to prevent conflict alert from activating. This waiver applies only to the specific instances cited above. The provisions of FAAO 7110.65 shall be applied in all other situations.

## **1.7 COORDINATION FOR FLIP-FLOP AIRSPACE**

a. There are several areas inside ZTL where airspace is assigned to a particular sector depending on the direction of takeoff and landing at Atlanta and Charlotte Airports. These areas include the low altitude airspace overlying the Atlanta Airport, the Athens West Departure Area, and the Gadsden East Area.

b. The transferring controller shall ensure that the receiving controller has a handoff or point out on all affected aircraft.

## **1.8 PRIMARY FREQUENCIES**

**High/Combined: Pulaski (ZTL 43) 132.97**

**Low: Logen (ZTL 49) 121.35**

# Chapter 2: STANDARD OPERATING PROCEDURES

## 2.1 Common Procedures to all control sectors/areas of ZTL:

- a. Do not accept handoffs from approach control unless separation is assured.
- b. Except as covered by a LOA or facility directive, do not clear aircraft to an altitude above or below the vertical limits of the transferring sector without verbal approval from the receiving.

## 2.3 Assumption of Approach Control Airspace.

The following low sectors will have jurisdiction over the stated approach control airspace if not open.

Logen 44 – AVL, TRI, TYS

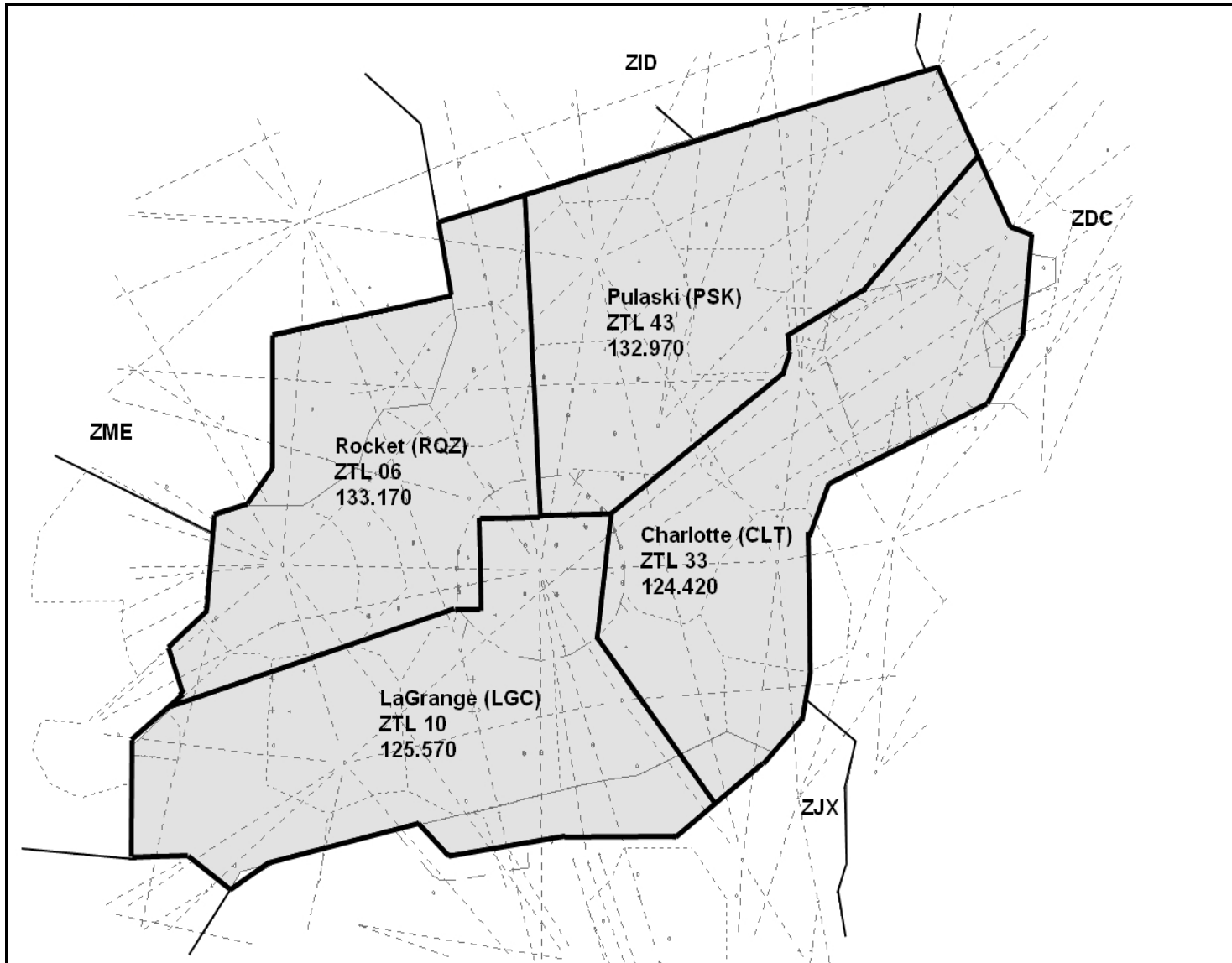
Sinca 19 – ATL, AGS, LINKS, CLT, GSP, GSO

Tiroe 09 – CSG, MCN, MGM

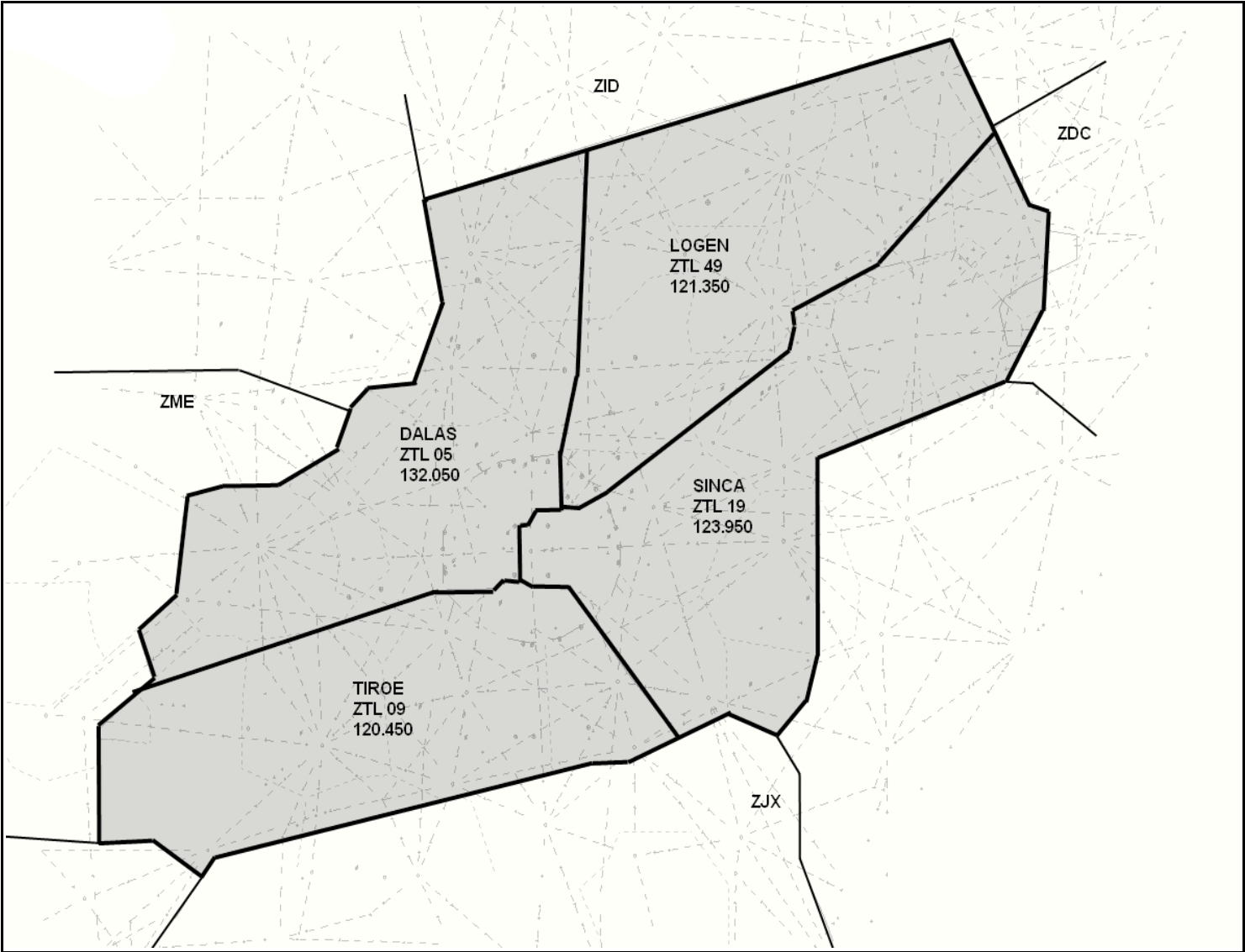
Dalas 05 – BHM, CHA

# Chapter 3: AIRSPACE DELEGATION

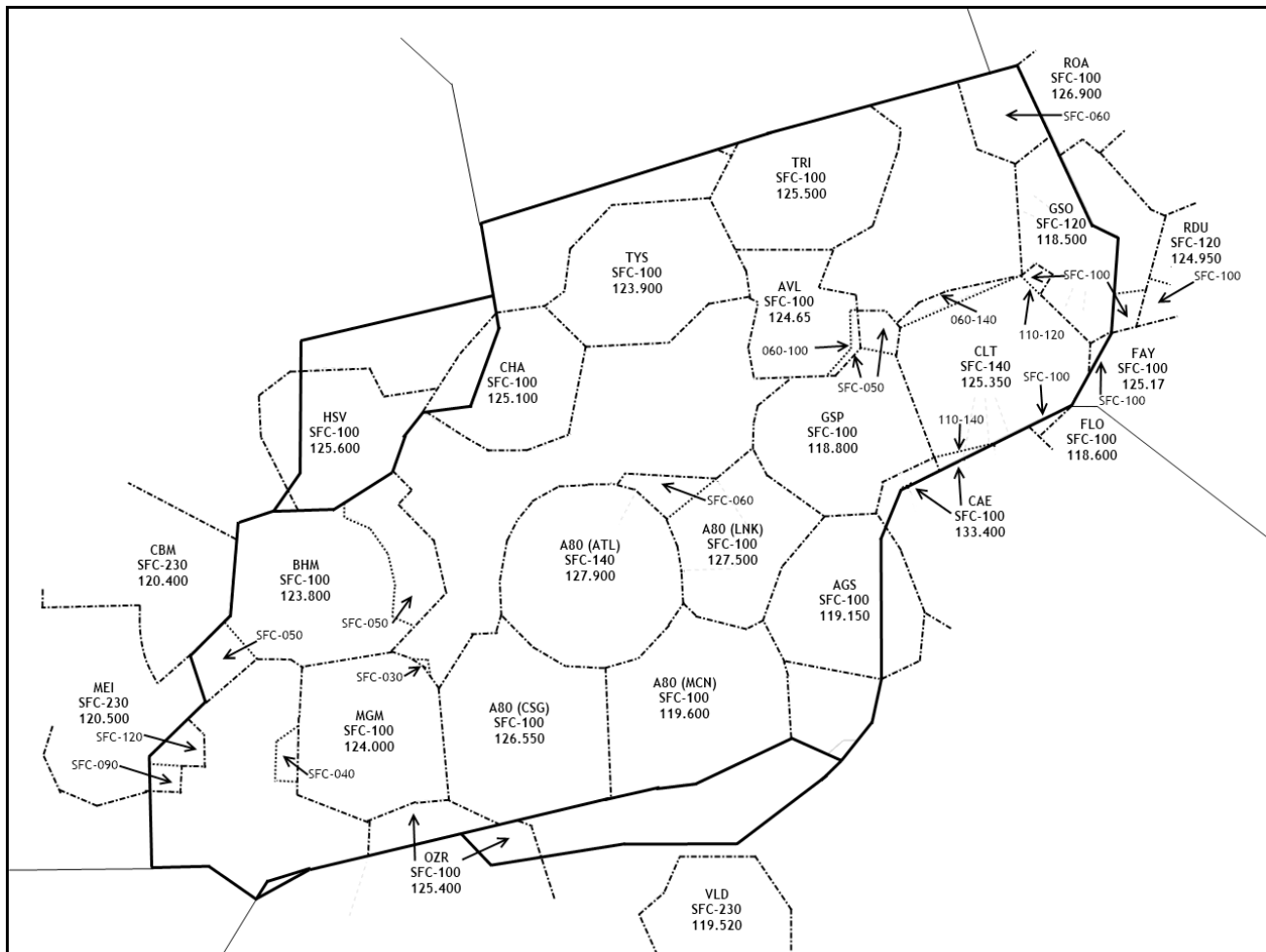
## 3.1 High Sectors (FL240-ABV)



3.1 Low Sectors (SFC-FL230)



### 3.3 TRACON Sectors (including bordering).



# Chapter 4: POSITION BINDERS

## SECTOR 43 - PULASKI

### 1. NARRATIVE/GENERAL DESCRIPTION

The Pulaski Sector is a high altitude sector with altitude limits from FL240 and above. This sector serves as a transition sector for departing air traffic from the CLT as well as providing spacing for aircraft arriving to the ATL. Pulaski becomes highly complex when the controller is tasked with separating this mix of traffic traversing simultaneously. The controller must be aware of various aircraft characteristics.

### 2. SECTOR COMMUNICATIONS INFORMATION

a. Monitored Frequencies:

Frequency: 132.970

Vox Server: rw.liveatc.net

Vox Channel: ZTL-43

### 3. SECTOR PROCEDURES

#### a. Mandatory Altitude Requirements.

1) BNA, MQY, JWN, MBT Arrivals. Shall cross the Pulaski/Rocket boundary at or below FL300 traffic permitting.

2) AGS Arrivals. Shall be descended to FL240 and handed off to sector 33.

3) CLT and CLT satellite Arrivals. Shall be cleared via the appropriate routings as described in the Atlanta ARTCC and Charlotte ATCT LOA with the following restrictions.

(a) HNV transition. Turbojets shall cross 10 DME south of HNV at FL240

(b) VXV transition. Turbojets shall cross 60 DME east of VXV at FL240

**4) To Logen Sector.** Landing in the ATL Terminal Area, may remain in the Pulaski Sector airspace after communication transfer without back coordination.

**5) To Charlotte Sector.** Arrivals to CAE/AGS at or above FL250 shall cross the Pulaski/Charlotte boundary at FL250.

**b. Flip-Flop Airspace (Informational).** Athens West Area. The "Athens West Area" is a portion of airspace delegated to Charlotte HI Sector from LaGrange HI Sector. The airspace is only released to CLT HI when ATL is on a west operation to allow for the continued climb of departing aircraft. The vertical limits of the "Athens West Area" are from FL240- FL270.



## SECTOR 33 - CHARLOTTE

### 1. NARRATIVE/GENERAL DESCRIPTION

Charlotte High altitude limits are FL240 and above. Traffic is comprised of en route flow plus Atlanta, Columbia, Greenville-Spartanburg, Greensboro, Raleigh- Durham and Charlotte departures/arrivals transitioning into/out of the en route environment. This sector serves as the primary feeder for the East Coast Routes into Washington Center.

### 2. SECTOR COMMUNICATIONS INFORMATION

a. Monitored Frequencies:

**Frequency: 124.420**

**Vox Server: rw.liveatc.net**

**Vox Channel: ZTL-33**

### 3. SECTOR PROCEDURES

#### a. Mandatory Altitude Requirements.

- 1) GSP, GMU, SPA, GYH Arrivals. Shall be established on J14 (SPA 059R) prior to the SPA 80 DME fix. These aircraft shall cross 80 miles northeast of SPA at FL240.
- 2) GSO/INT Arrivals. Shall be cleared via the Brook Arrival. These aircraft shall cross 30NM northeast of SPA at FL240.
- 3) Atlanta Terminal Area Arrivals via the AWSON STAR shall cross the Pulaski/Charlotte boundary at or below FL300.
- 4) AGS Arrivals. Clear direct IRQ. Descend to FL240 to allow the aircraft to cross 15 miles North of IRQ at 11,000.

#### b. Radar Arrival Routes and Procedures.

- 1) RDU Arrivals. Cleared via IRQ CAE BUZZY STAR. Enroute aircraft at or below FL330, ATL departures at or below FL290.
- 2) GSP Arrivals. Over IRQ shall be descended to FL240 and handed off to the Sinca Sector.

**c. Airspace Shelves Airspace.** Procedures for conducting operations in the Raleigh/Charlotte shelves are found in the ZDC/ZTL Letter of Agreement.

**d. Flip-Flop Airspace (Informational).** Athens West Area. The "Athens West Area" is a portion of airspace delegated to Charlotte HI Sector from Dublin HI Sector. The airspace is only released to CLT HI when ATL is on a west operation to allow for the continued climb of departing aircraft. The vertical limits of the "Athens West Area" are from FL240 - FL270.

## SECTOR 49 - LOGEN

### 1. NARRATIVE/GENERAL DESCRIPTION

The Logen Sector primarily handles air carrier jet and turboprop aircraft from SFC-FL230 (not including approach control airspace), and descending from northeast to southwest into the Atlanta Terminal Area. Secondary traffic flows include arrivals to, and departures from, TYS, GSP, AVL and A80 approach controls. This flow is created by the funneling of arrivals (normally air carrier jets) into a single stream prior to entering the A80 Atlanta arrival gate. Dual STAR's are available during heavy traffic periods (PECHY STAR which is ATC assigned only) the majority of this traffic is general aviation and traverses the area in all directions. This sector also serves as an arrival sector for aircraft landing CLT, as well as, separating aircraft arriving to surrounding approach control facilities. Logen becomes highly complex when the controller is tasked with separating this mix of traffic traversing simultaneously. Potential trouble spots include:

- a. A high volume of traffic.
- b. Sequencing and spacing requirements for inbounds to the Atlanta Terminal Area.
- c. Overflight traffic between 130 and FL230, between ODF and the ATL 40 DME.
- d. Holding, during periods of reduced capacity or excess demand.

### 2. SECTOR COMMUNICATIONS INFORMATION

- a. Monitored Frequencies:

**Frequency: 121.350**

**Vox Server: rw.liveatc.net**

**Vox Channel: ZTL-49**

### 3. SECTOR PROCEDURES

#### a. Radar Arrival Routes and Procedures.

- 1) From Pulaski Sector. Aircraft transitioning from the Pulaski Sector landing in the Atlanta Terminal Area may remain in the Pulaski Sector airspace after communication transfer without back coordination.
- 2) TRI arrivals shall be cleared AOB 17,000 feet.
- 3) To Dalas. Arrivals to CHA north of ODF shall enter the Dalas Sector at or below FL180.
- 4) CLT/GSO/INT Arrivals. Shall be descended to make LOA crossing restrictions.
- 5) TYS/TRI/AVL Arrivals. Shall be descended to make LOA crossing restrictions.
- 6) GSP Arrivals From south of a line from SUG-BZM. Shall be descended to make LOA crossing restrictions with CLT. And transferred to CLT Approach upon successful hand

off. Aircraft from the north shall be descended in order to make LOA restrictions and transferred to GSP approach.

7) HKY Airport. Logen is responsible for providing approach and departure services to aircraft arriving and departing HKY Airport.

## SECTOR 19 - SINCA

### 1. NARRATIVE/GENERAL DESCRIPTION

Sinca Sector IFR altitude limits are SFC through FL230 (not including approach control airspace. Sinca Sector sequences IFR arrivals to the Atlanta Terminal Area entering Atlanta ARTCC airspace from the southeast. These arrivals enter Sinca airspace from four different directions, and must be at the prescribed miles-in-trail prior to the Atlanta 40 DME. This sector also provides air traffic service primarily to Charlotte, NC (CLT) arrivals and departures. Complexity is high due to limited airspace capacity, high traffic volume, and required spacing into the Charlotte Douglas Airport.

### 2. SECTOR COMMUNICATIONS INFORMATION

a. Monitored Frequencies:

**Frequency: 123.950**

**Vox Server: rw.liveatc.net**

**Vox Channel: ZTL-19**

### 3. SECTOR PROCEDURES

a. Radar Arrival Routes and Procedures.

1) Pilot's discretion descents resulting from the issuance of a crossing restriction may be issued by Sinca Sector for aircraft landing within the Atlanta Terminal Area, which are transitioning from the Dublin Sector, without back coordination.

2) Arrivals to ATL shall be cleared via CANUK STAR or SINCA STAR.

3) Arrivals to Atlanta Terminal Area satellite airports shall be cleared via IRQ TRBOW/JRAMS STAR.

4) Turboprop aircraft inbound to the Charlotte Terminal Area shall cross GRD at 11,000 feet and hand off to Sector 31.

5) Arrivals to CAE and SAV shall cross 35 miles west at 11,000 feet.

6) AGS Arrivals. Shall be cleared direct to the IRQ direct destination airport and descended to cross 15 miles north of IRQ at 11,000 feet.

## **SECTOR 10 - LA GRANGE**

### **1. NARRATIVE/GENERAL DESCRIPTION**

a. LaGrange Sector altitude limits are FL240 -ABV. There are three predominant traffic flows within this sector; one is created by J73 north and southbound en route traffic, another is created by J37 northeast and southwest bound traffic and last, arrivals to the Atlanta Terminal Area transitioning via the LGC and HONIE STAR and the DIFFI STAR.

### **2. SECTOR COMMUNICATIONS INFORMATION**

a. Monitored Frequencies:

**Frequency: 127.570**

**Vox Server: rw.liveatc.net**

**Vox Channel: ZTL-10**

### **3. SECTOR PROCEDURES**

a. Radar Arrival Routes and Procedures.

- 1) ATL Arrivals via LGC/ HONIE STAR. Descend to FL240 and hand off to Sector 09.
- 2) CBM Arrivals. Descend to FL280 and hand off to Sector 06.
- 4) BHM/MGM/CSG/MCN Arrivals. Descend to FL240 and hand off to the appropriate sector.

## **SECTOR 09 - TIROE**

### **1. NARRATIVE/GENERAL DESCRIPTION**

The Tiroe Sector altitude limits are surface to FL230 (excluding approach control airspace. The predominant traffic flow is into the ATL terminal airspace. Extensive vectoring and spacing is required if there is high volume of descending aircraft into ATL along with crossing traffic climbing/descending to/from BHM, MGM, CSG, DHN, and other airports. Tiroe Sector provides arrival and departure services to the Macon/Robins Terminal Area when A80 releases control. This sector also controls all south departures for the Atlanta Terminal area.

### **2. SECTOR COMMUNICATIONS INFORMATION**

a. Monitored Frequencies:

**Frequency: 120.450**

**Vox Server: rw.liveatc.net**

**Vox Channel: ZTL-09**

### **3. SECTOR PROCEDURES**

#### **a. Mandatory Altitude/Pilot Discretion Descents.**

1) Pilot's Discretion descents resulting from the issuance of a crossing restriction may be issued by Tiroe Sector for aircraft landing in the Atlanta Terminal Area, that are transitioning from LaGrange Sector, without back coordination.

#### **b. Radar Arrival/Departure Routes and Restrictions.**

1) Turboprop aircraft at or above FL240 landing Atlanta Terminal Airspace will be descended to FL240 and handed off to TIROE Sector. TIROE Sector shall descend these aircraft to keep them below the high volume of jet and turbojet aircraft inbound to the Atlanta Terminal Area.

2) Departures off Birmingham Airport overflying SZW via MGM SZW or MGM J41 SZW should not normally be rerouted in Tiroe Sector or LaGrange Sector airspace east of MGM without prior coordination. This will help these aircraft avoid climbing into ATL arrivals.

## SECTOR 06 - ROCKET

### 1. NARRATIVE/GENERAL DESCRIPTION

a. Rocket is an high sector (FL240 and above). There are several predominant traffic flows within this sector; one created by A80 Atlanta/Satellite Sector departures, one by ERLIN/HERKO/Rome Stars, one by MEM ARRs/DEPs, and one by BNA DEPs. The traffic departing or overflying BNA and the J22 traffic cross all transitions to the ERLIN/HERKO/RMG STAR and limit the options for the controller in sequencing. Rocket must work in concert with Dallas Sector to provide a steady flow of traffic that will neither overload Dallas, nor allow unfilled gaps in the arrival sequence.

### 2. SECTOR COMMUNICATIONS INFORMATION

a. Monitored Frequencies:

**Frequency: 133.170**

**Vox Server: rw.liveatc.net**

**Vox Channel: ZTL-06**

### 3. SECTOR PROCEDURES

#### a. Radar Arrival Routes and Procedures.

1) ATL Arrivals via RMG / ERLIN STAR. Descend to FL240 and hand off to Sector 05.

2) BHM Arrivals. Descend to FL240 and hand off to Dallas Sector in sufficient time for the aircraft to BHM TRACON at 11,000.

4) CBM)/GTR/UBS). Descend to FL240 and hand off to Dallas Sector.

5) MEI/NMM Arrivals. Arrivals shall cross the ZTL/ZME boundary at or below FL230. Sector 06 shall descend the aircraft to FL240 and hand off to Dallas/Tiroe as appropriate.

6) CLT Arrivals. Route via VXV JOHNS (RNAV)/SHINE ARRIVAL or via ATL ADENA (RNAV)/UNARM ARRIVAL.

7) CSG/PIM/LSF Turbojet Arrivals. Descend to FL240 and hand off to the appropriate sector in sufficient time to meet Inter-Area restrictions.

8) AVL/GSP/HSV/CHA /TYS/TRI/MGM Arrivals. Descend to FL240 and hand off to the appropriate sector

**NOTE- During high levels of traffic, AVL/GSP arrivals shall be routed NORTH of SOT.**

1) To Pulaski. CLT arrivals shall cross the Rocket/Pulaski Sector boundary at or below FL330.

**c. Flip-Flop Airspace (Informational).** Athens West Area. The "Athens West Area" is a portion of airspace delegated to Charlotte HI Sector from LaGrange HI Sector. The airspace is only released to CLT HI when ATL is in west Ops. The vertical limits of the "Athens West Area" are from FL240 - FL270.

## SECTOR 05 - DALAS

### 1. NARRATIVE/GENERAL DESCRIPTION

a. Dalas has one predominant arrival traffic flow. This flow is created by the funneling of arrivals (normally air carrier jets) into a single stream prior to entering the A80 Atlanta arrival gate. Dual STAR's are available during heavy traffic periods (ATC assigned only). Dalas is responsible for ensuring that the aircraft cross the arrival fixes at the correct procedural altitudes, prescribed spacing minima, and at compatible speeds. Dalas also has two departure flows out of ATL.

b. Dalas is a low altitude sector (SFCFL230 excluding approach control airspace) designed to expedite A80 Atlanta/Satellite Sector departures through the lower altitudes on westerly headings.

**NOTE:** The Dalas/Logen boundary moves East of V97 when A80 Atlanta Sector is on an East operation and West of V97 when A80 Atlanta Sector is on a West operation.

### 2. SECTOR COMMUNICATIONS INFORMATION

a. Monitored Frequencies:

Frequency: 132.050

Vox Server: [rw.liveatc.net](http://rw.liveatc.net)

Vox Channel: ZTL-05

### 3. SECTOR PROCEDURES

#### a. Mandatory Altitude/Pilot Discretion Descents/Automation.

1) CSG/PIM/LSF Turbojet Arrivals. Shall cross the Tiroe Sector common boundary at or below FL190 descending to 11,000 feet or lowest available altitude. If the aircraft's course will not keep the aircraft west of the LGC VORTAC, assign the aircraft a coordinated vector heading which will keep the arrival on such a course.

2) "Pilot's Discretion" descents (i.e. resulting from the issuance of a crossing restriction) and release for turns direct RMG, ERLIN, or Dalas on aircraft landing within The A80 Atlanta Sector may be issued without back coordination.

3) Special Point Out Procedures. A80 Atlanta Satellite Sector Arrivals filed AOB FL230 - Provide RQZ Sector with a data block to assist in arrival planning.

#### b. Radar Arrival/Departure Routes and Restrictions.

1) Arrivals to GVL or AJR crossing the Logen/Dalas boundary north of V54, at or above 11,000 feet shall cross the boundary at or descending to 11,000 feet and handed off to Logen Sector.

2) Arrivals to WDR, AHN, or 19A crossing the Dalas/Logen boundary south of V54 at or above 11,000 feet shall cross the boundary at or below FL230, descending to 11,000 feet, and be handed off to Logen Sector.



## **Chapter 5: Airspace Splits**

ZTL Airspace Splits will be determined by the CIC/TMU. Airspace splits will depend on traffic density and type of event, such as ATL, CLT, etc.