ORDER
CLT 7110.65J
CHG 1

Charlotte ATCT (CLT)

Tower and Approach Control

ZTL

Standard Operating Procedures

3 September, 2026

Table of Contents

Chapter 1. Introduction **5**
- **Section 1. Introduction** **5**
  - 1-1-1. PURPOSE 5
  - 1-1-2. APPROVAL 5
  - 1-1-3. AUDIENCE 5
  - 1-1-4. DISTRIBUTION 5
  - 1-1-5. CANCELLATION 5
  - 1-1-6. EFFECTIVE DATE 5

Chapter 2. General **6**
- **Section 1. Equipment Overview** **6**
  - 2-1-1. POSITIONS/FREQUENCIES/STARS ID 6
- **Section 2. Scratchpads** **7**
  - 2-2-1. SOUTH OPERATIONS SCRATCHPAD MEANINGS 7
  - 2-2-2. NORTH OPERATIONS SCRATCHPAD MEANINGS 8
- **Section 3. General** **9**
  - 2-3-1. TRANSFER OF CONTROL BETWEEN CONTROL POSITIONS 9
  - 2-3-2. USE OF QUICK-LOOK FOR DATA TRANSFER BETWEEN TRACON AND TOWER 10
  - 2-3-3. AIRSPACE JURISDICTION 10
  - 2-3-4. CONSOLIDATED WAKE TURBULENCE (CWT) 10
  - 2-3-5. AUTOMATED POINT OUT PROCEDURES 10
- **Section 4. Runway Information** **11**
  - 2-4-1. RUNWAY UTILIZATION 11
  - 2-4-2. RUNWAY CHANGES 11
- **Section 5. Opposite Direction Operations** **12**
  - 2-5-1. GENERAL 12
  - 2-5-2. RESPONSIBILITIES 12

Chapter 3. Tower Cab **13**
- **Section 1. Equipment** **13**
  - 3-1-1. TOWER CAB POSITIONS AND FREQUENCIES 13
  - 3-1-2. POSITION COMBINATION/DE-COMBINATION 13
- **Section 2. Flight Data/Clearance Delivery** **14**
  - 3-2-1. RESPONSIBILITIES 14
  - 3-2-2. IFR DEPARTURES 14
  - 3-2-3. VFR DEPARTURES 15

3-2-4. PROCEDURES FOR ISSUING CLEARANCES VIA PDC AND CPDLC 15
3-2-5. AIRCRAFT APREQ (CALL FOR RELEASE/CFR) 16
Section 3. Ground Control 17
3-3-1. AREA OF JURISDICTION 17
3-3-2. CLEARANCE AMENDMENTS TO TAXIING AIRCRAFT 18
3-3-3. SEQUENCING AND RUNWAY USE PLAN 18
3-3-4. OTHER RESPONSIBILITIES 18
3-3-5. KNOWN SCENERY DISCREPANCIES 18
Section 4. Local Control 19
3-4-1. AREA OF JURISDICTION 19
3-4-2. CROSSING COORDINATION WITH GROUND CONTROL 20
3-4-3. COORDINATION BETWEEN LOCAL CONTROL POSITIONS 20
3-4-4. COORDINATION BETWEEN LOCAL CONTROL AND DEPARTURE/SATELLITE 20
3-4-5. TURBOJET NOISE ABATEMENT TRACKS 21
3-4-6. PREDEFINED DEPARTURE HEADINGS 22
3-4-7. SIMULTANEOUS TURBOJET DEPARTURES ON RUNWAY 18 AND 19L 24
3-4-8. GO AROUND PROCEDURES 24
3-4-9. LINE UP AND WAIT (LUAW) 24
3-4-10. ASDE-X 24
Chapter 4. TRACON 25
Section 1. Positions 25
4-1-1. TRACON POSITIONS AND FREQUENCIES 25
4-1-2. COMBINING THE TRACON 25
Section 2. Departure/Satellite Radar 26
4-2-1. DEPARTURE/SATELLITE RADAR AIRSPACE 26
4-2-2. POSITION COMBINATION/DE-COMBINATION 30
4-2-3. DEPARTURE RADAR WEST/EAST RESPONSIBILITIES 30
4-2-4. SATELLITE RADAR RESPONSIBILITIES 30
4-2-5. DEPARTURE RADAR EAST/WEST PRE-ARRANGED COORDINATION AREA 31
4-2-6. SOUTH TRANSFER AREA 32
4-2-7. DEPARTURE RADAR/ARRIVAL RADAR PRE-ARRANGED COORDINATION AREAS 32
Section 3. Arrival Radar 33
4-3-1. AIRSPACE 33
4-3-2. POSITION COMBINATION/DE-COMBINATION 35
4-3-3. ARRIVAL RADAR EAST/NORTHWEST/SOUTHWEST RESPONSIBILITIES 35
4-3-4. ARRIVAL RADAR FLOWS 36
4-3-5. ARRIVAL/FINAL RADAR AND ARRIVAL/DEPARTURE RADAR PRE-ARRANGED COORDINATION AREAS

36
Section 4. Final Radar **37**
4-4-1. AIRSPACE 37
4-4-2. POSITION COMBINATION/DE-COMBINATION 39
4-4-3. FINAL RADAR WEST/CENTER/EAST RESPONSIBILITIES 39
4-4-4. FINAL RADAR ALTITUDE ASSIGNMENTS 40
4-4-5. REDUCED SEPARATION ON FINAL 41
4-4-6. BEST OPERATING PRACTICES AND PROBLEM AREAS 41
4-4-7. FINAL RADAR/ARRIVAL RADAR PRE-ARRANGED COORDINATION AREA 41
Section 5. Pre-Arranged Coordination **42**
4-5-1. DEPARTURE RADAR WEST AND DEPARTURE RADAR EAST 42
4-5-2. DEPARTURE RADAR AND ARRIVAL RADAR 42
4-5-3. FINAL RADAR AND ARRIVAL RADAR 43
Appendices **44**
Appendix A. Discrepancies Between Sceneries **44**
Appendix B. Available Takeoff Distances **45**
Appendix C. Controller Relief Briefing Checklist **46**
C-1. FLIGHT DATA/CLEARANCE DELIVERY AND GROUND CONTROL RELIEF BRIEFING CHECKLIST 46
C-2. GROUND AND LOCAL CONTROL RELIEF BRIEFING CHECKLIST 47
Appendix D. Departure Flight Strip Marking **47**
Appendix E. Runway Use Plan **49**
E-1. RNAV TURBOJET DEPARTURES 49
E-2. NON-RNAV TURBOJET DEPARTURES 49
E-3. RNAV SID FLOWS (SOUTH OPERATION) 50
E-4. RNAV SID FLOWS (NORTH OPERATION) 51
Appendix F. STARS Video Maps 52
Appendix G. Interfacility Airspace **54**
Appendix H. Letters of Agreement **54**
Appendix I. Consolidated Wake Turbulence (CWT) Separation **55**
I-1. AIRCRAFT WAKE CATEGORIES 55
I-2. WORDS AND PHRASES 55
I-3. FULL LENGTH DEPARTURES 56
I-4. INTERSECTION DEPARTURES 57
I-5. RADAR SEPARATION MINIMA 58
Appendix J. Waiver 98-T-60: Successive or Simultaneous Departures Authorization **58**

Chapter 1. Introduction

Section 1. Introduction

1-1-1. PURPOSE

This Order establishes standard operating procedures for use by persons providing air traffic control services at the Charlotte-Douglas (CLT) Airport Traffic Control Tower (ATCT) on the VATSIM network. This Order is designed to supplement VATUSA and ZTL directives.

1-1-2. APPROVAL

Zach Williams
Air Traffic Manger
Virtual Atlanta ARTCC

1-1-3. AUDIENCE

This order applies to all vZTL Air Traffic Control Specialists and vZTL Visiting Air Traffic Control Specialists manning the Charlotte (CLT) Airport Traffic Control Tower (ATCT) and Terminal Radar Approach Control (TRACON positions).

1-1-4. DISTRIBUTION

This Order is available in the ZTL Files Library located at https://www.ztlartcc.org/controllers/files, under SOPs.

1-1-5. CANCELLATION

This Order cancels CLT ATCT 7110.65I dated 9 July, 2026.

1-1-6. EFFECTIVE DATE

This Order is effective as of 3 September, 2026.

Chapter 2. General

Section 1. Equipment Overview

2-1-1. POSITIONS/FREQUENCIES/STARS ID

Tower Cab

Position (STARS ID)	Frequency
Arrival ATIS	121.15
Departure ATIS	132.1
Clearance Delivery	127.15
Ground Control East	121.9
Ground Control West	121.8
Local Control East (K)	118.1
Local Control Center (T)	126.4
Local Control West (O)	133.35
Tower CIC	N/A

TRACON

Position (STARS ID)	Frequency
Departure Radar West (W)	120.5
Departure Radar East (E)	124.0
Satellite Radar North (N)	134.75
Satellite Radar South (S)	120.05
Satellite Radar Concorde (Q)	128.32
Arrival Radar East (H)	126.15
Arrival Radar Northwest (U)	125.35
Arrival Radar Southwest (D)	135.6
Final Radar East (A)	127.7
Final Radar Center (M)	119.0
Final Radar West (F)	132.7
Traffic Management (TC)	199.997
TRACON CIC	N/A

Section 2. Scratchpads

2-2-1. SOUTH OPERATIONS SCRATCHPAD MEANINGS

Entry	Meaning
R18	Assigned runway 18*
19L	Assigned runway 19L*
19R	Assigned runway 19R*
V18	Visual approach or VFR, runway 18, following preceding traffic
V9L	Visual approach or VFR, runway 19L, following preceding traffic
V9R	Visual approach or VFR, runway 19R, following preceding traffic
N18	Visual approach or VFR, runway 18, preceding traffic not in sight
N9L	Visual approach or VFR, runway 19L, preceding traffic not in sight
N9R	Visual approach or VFR, runway 19R, preceding traffic not in sight
OVH	Overhead maneuver

**Verbal coordination is required if joining not at altitude or inside of capture point when instrument approaches are being conducted. No other scratchpad, other than the runway assignment, is required when instrument approaches are being conducted.*

2-2-2. NORTH OPERATIONS SCRATCHPAD MEANINGS

Entry	Meaning
R36	Assigned runway 36*
1R	Assigned runway 1R*
1L	Assigned runway 1L*
V36	Visual approach or VFR, runway 36, following preceding traffic
V1R	Visual approach or VFR, runway 1R, following preceding traffic
V1L	Visual approach or VFR, runway 1L, following preceding traffic
N36	Visual approach or VFR, runway 36, preceding traffic not in sight
N1R	Visual approach or VFR, runway 1R, preceding traffic not in sight
N1L	Visual approach or VFR, runway 1L, preceding traffic not in sight
OVH	Overhead maneuver
**Verbal coordination is required if joining not at altitude or inside of capture point when instrument approaches are being conducted. No other scratchpad, other than the runway assignment, is required when instrument approaches are being conducted.*	

Section 3. General

2-3-1. TRANSFER OF CONTROL BETWEEN CONTROL POSITIONS

a. **General.** After completion of a radar handoff and once communications have been transferred, all aircraft are released for turns, climb or descent (on course, to the traffic pattern, or approach course), as well as speed control, in the transferring controller's airspace. Exceptions are:

   i. Final radar must not descend any aircraft into that satellite airspace that underlies the final radar airspace without individual coordination.

   ii. Final Radar Center must not descend an aircraft assigned by the arrival controller to the center runway below 8,000 feet without coordination with the appropriate arrival controller(s).

b. **Arrival Radar to Final Radar.** Transfer of control from the arrival radar positions to the final radar positions must include an assumed point-out on traffic re-entering the arrival radar controller's airspace. This applies only to traffic proceeding inbound toward the airport after exiting the final airspace located at the back of the final airspace corridor.

c. Local Control to Departure or Satellite.

   i. **Turbojets:** 2 miles from the departure end of the runway, for climb and/or turns toward the assigned Departure Transition Area or destination airport. The Departure/Satellite controller must protect for the initial turbojet and propeller aircraft departure courses.

   ii. **Propeller aircraft:** once established on the Tower assigned heading, for climbs and/or turns toward the assigned Departure Transition Area or destination airport. The Departure/Satellite controller must protect for the initial turbojet and propeller aircraft departure courses.

d. Final Radar to Local Control for arrivals on final.

   i. **Transfer of control.** Local Control has control for arrivals on final at the final approach fix.

   ii. **Transfer of communications.** Final Radar will transfer communications to Local at the final approach fix for instrument approaches or between five and ten miles from the airport for VFR operations/visual approaches.

e. **Coordination for visual separation.** The transferring controller must advise the receiving controller if two transferred aircraft have each other in sight and are maintaining visual separation. This requirement must also apply to local control, who must advise departure control or satellite control if this situation exists. The scratchpads starting with V are exempt and suffice as coordination for visual separation existing between aircraft.

2-3-2. USE OF QUICK-LOOK FOR DATA TRANSFER BETWEEN TRACON AND TOWER

a. In accordance with 2-3-1d, coordination between the Final Radar and the Local Control positions concerning arrival aircraft must be considered to have been effected using Quick Look and appropriate scratchpad (2-2).
b. The Local Control positions must Quick Look the position(s) working traffic on final. If an aircraft must be retained by Final Radar until after the TCP specified in 2-3-1d, Final Radar must coordinate with Local Control.

2-3-3. AIRSPACE JURISDICTION

Airspace jurisdiction is 500 feet below the depicted base cardinal altitude. (This is for use with VFR aircraft.)

2-3-4. CONSOLIDATED WAKE TURBULENCE (CWT)

CLT is authorized to use the Consolidated Wake Turbulence (CWT) recategorization (recat) separation standards listed in Appendix I and the 7110.126, in lieu of standard wake turbulence minima in the 7110.65.

2-3-5. AUTOMATED POINT OUT PROCEDURES

a. The STARS automated point-out function may be used in accordance with the following:

   i. The primary scratchpad must indicate the aircraft's next fix or SID/STAR.

   ii. Aircraft descending/climbing must indicate their assigned altitude in the data block via the +### function. Use thousands of feet; e.g. assigned altitude of 3,000 would be +030.

NOTE- *(SPLAT)(POSITION ID)(SLEW) initiates an automated point out. (SLEW) accepts it.*

Section 4. Runway Information

2-4-1. RUNWAY UTILIZATION

a. The Tower CIC must determine the departure/landing direction. Departure/landing direction must determine the "active runways".

b. The Tower CIC must approve or disapprove of opposite direction operations (ODOs). Once the CIC approves an ODO, automatic releases are canceled until the ODO has been completed.

c. Standard runway configuration:

   a. North Operation: three runways – arrive 1L, arrive and depart 1R and 36.

   b. South Operation: three runways – arrive 19R, arrive and depart 19L and 18.

d. South Operation is the preferred calm wind configuration.

2-4-2. RUNWAY CHANGES

a. The Tower CIC has the primary responsibility for determining when a runway change is required.

b. Once a determination has been made to change runways, the Tower CIC must:

   i. Coordinate with the TRACON CIC. The Tower/TRACON CICs will determine the last arrival and last departure to the runways, as appropriate.

   ii. Advise the TRACON CIC when the last arrival has landed and when the last departure is airborne.

c. The TRACON and Tower CICs must advise all intra-facility sectors of the runway change. The TRACON CIC will coordinate with all neighboring facilities of the runway change.

d. The controllers at the affected positions must exchange airspace and traffic information to any other controllers affected due to the airspace change with the direction of landing.

Section 5. Opposite Direction Operations

2-5-1. GENERAL

a. Opposite Direction Operations (ODO) at CLT are NOT authorized to the same or parallel runways except to aircraft receiving operational priority or when an aircraft has an operational necessity.

b. The ODO procedures apply to:

   i. ALL runway configurations.

   ii. ALL aircraft operating IFR or VFR.

c. Consider an aircraft on an opposite direction approach that will circle to land to a runway in use to be an ODO until they commence circling. ***EXAMPLE-*** *In a south operation, ILS 36 circle to land 18.*

2-5-2. RESPONSIBILITIES

a. The following responsibilities are of the Tower CIC for departures or of the TRACON CIC for arrivals:

   i. Initiating all required verbal coordination to accomplish an ODO. Initial coordination must include callsign, aircraft type, and arrival or departure runway.

   ii. Ensuring compliance with ODO cut-off points between aircraft conducting ODOs. The cut-off point is a 10 mile final. ***NOTE-*** *If the conditions described in this section are not met, action must be taken to protect the integrity of the cut-off points.*

b. All coordination must include the word "OPPOSITE DIRECTION."

c. Traffic advisories must be exchanged with both aircraft involved.

   EXAMPLE- *"Opposite direction traffic, one eight mile final, Boeing 737."*
   EXAMPLE- *"Opposite direction traffic departing runway 19R, Cherokee."*

d. ***Same Runway ODO***

   i. Same runway ODO conducted inside the cut-off point are prohibited except in an emergency.

   ii. A same runway opposite direction departure must be airborne and turned to avoid conflict and appropriate separation established before an arrival reaches the cut-off. Use of visual separation is NOT authorized.

   iii. A same runway opposite direction arrival must not reach the cut-off point before the preceding arrival has crossed the runway threshold.

e. ***Parallel Runway ODO***

   i. An ODO conducted from parallel runways must be issued a turn away from the opposing traffic when inside the cutoff point (10 mile final) to the other runway. Use of visual separation IS authorized once a turn away from opposing traffic is issued.

Chapter 3. Tower Cab

Section 1. Equipment

3-1-1. TOWER CAB POSITIONS AND FREQUENCIES

Position (STARS ID)	Frequency
Arrival ATIS	121.15
Departure ATIS	132.1
Flight Data	
Clearance Delivery	127.15
Ground Control East	121.9
Ground Control West	121.8
Local Control East (K)	118.1
Local Control Center (T)	126.4
Local Control West (O)	133.35
Tower CIC	

3-1-2. POSITION COMBINATION/DE-COMBINATION

a. The tower cab is combined to Local Control East.

b. **Tower CIC.** The Tower CIC, if not standalone, may be combined to any position as appropriate.

c. **Local Control.** Local Control West/Center combine to/de-combine from Local Control East.

d. Ground Control.

i. Ground Control West combines to/de-combines from Ground Control East.

ii. Ground Control East combines to/de-combines from Local Control East.

e. **Clearance Delivery/Flight Data.** Flight Data combines to Clearance Delivery. Clearance Delivery combines to Ground Control East.

Section 2. Flight Data/Clearance Delivery

3-2-1. RESPONSIBILITIES

a. Flight Data.

i. Responsible for maintaining the arrival and departure ATIS. Runways in use shall be selected by the Tower CIC. Type of approach in use shall be selected by the TRACON CIC. Flight Data shall ensure all Tower positions are aware of the current ATIS code.

ii. Shall enter flight plans and amendments as appropriate. Coordinate with Clearance Delivery as appropriate for clearances to be issued.

iii. Ensure aircraft are routed to be in compliance with Traffic Management Initiatives. Amend flight plan remarks to ensure that other controllers are aware of assigned Expect Departure Clearance Times, as required.

b. Clearance Delivery.

i. Issue IFR departure clearances either verbally, via Pre Departure Clearance (PDC), or via Controller Pilot Data Link Communications (CPDLC).

ii. Issue VFR departure instructions.

iii. Forward all VFR/IFR flight strips to the appropriate control positions once clearances are issued.

3-2-2. IFR DEPARTURES

a. Turbojets must be assigned 8,000ft, or requested altitude if lower, and the appropriate SID as follows:

i. Requesting 11,000ft or above: appropriate RNAV SID or CHARLOTTE SIX (CLT6) if unable RNAV SID.

ii. Requesting 10,000ft or below (tower en route): CHARLOTTE SIX (CLT6).

iii. GSO arrivals: IRVVV ONE (IRVVV1), assigned final altitude at and below 9,000ft.

b. All turboprops/props must be assigned 4,000ft, or requested altitude if lower, and the CHARLOTTE SIX (CLT6) SID.

c. Assign IFR departures advising "NO SID" the following specific information plus the appropriate clearance items.

i. Turboprop/prop: tower assigned heading and an initial altitude of 4,000.

ii. Turbojet: noise abatement heading an initial altitude of 8,000, accelerate speed to 250 knots, and if unable advise ATC. Upon reaching 10,000, accelerate to 280 knots, and if unable advise ATC.

3-2-3. VFR DEPARTURES

a. Prepare a flight progress strip to include the destination if known (initial heading otherwise) and requested altitude.

b. Issue a clearance out of the Class B airspace, appropriate departure frequency, beacon code, and an initial altitude as follows:

   i. Turboprop/prop:
      1. Requesting 4,000 or above: "Maintain VFR at 4,000"
      2. Requesting below 4,000: "Maintain VFR at or below 4,000" with requested altitude in the flight strip

   ii. Turbojet:
      1. Requesting 8,000 or above: "Maintain VFR at 8,000"
      2. Requesting below 8,000: "Maintain VFR at or below 8,000" with requested altitude in the flight strip

3-2-4. PROCEDURES FOR ISSUING CLEARANCES VIA PDC AND CPDLC

a. PDCs may not be used to issue amended clearances. A pilot cannot respond to a PDC. Use TDLS to send PDCs: https://tdls.virtualnas.net/.

b. Pilots will return a response of W (WILCO) or U (UNABLE) to CPDLC. Do not forward a CPDLC-cleared aircraft's flight strip to Ground Control until a 'W' reply is received.

   i. .CLTCPDLC [departure STARS ID] [expected runway] [route code] - issues Coded Departure Route.
   Example: .CLTCPDLC 1W 19L CLTATLRP

   ii. .CLTCPDLCRR [depature STARS ID] [expected runway] [route code] - issues Coded Departure Route as a reroute.
   Example: .CLTCPDLCRR 1W 19L CLTATLRP

   iii. .CLTCPDLCAM [departure STARS ID] [expected runway] - issues current route as a CPDLC reroute (used for non-CDR).
   Example: .CLTCPDLCAM 1W 36

c. If incorrect information is sent via CPDLC, use the following phraseology: *"(Callsign) DISREGARD C-P-D-L-C MESSAGE"* and issue a corrected clearance.

   NOTE *- CPDLC is not available for propeller aircraft.*

3-2-5. AIRCRAFT APREQ (CALL FOR RELEASE/CFR)

Upon being advised by the Traffic Management Unit (TMU) to APREQ departures to a certain destination, complete the following items for aircraft destined to the aforementioned location:

a. Issue the clearance and advise the aircraft to contact clearance delivery upon engine start.

b. When the aircraft advises ready for engine start, call Atlanta Center Traffic Management and advise them of an assumed departure ("wheels up") time.

c. Atlanta Center Traffic Management will advise of departure release time and, if necessary, route amendments.

d. After coordination has been completed, advise the aircraft of the release time and indicate it in the remarks on the strip.

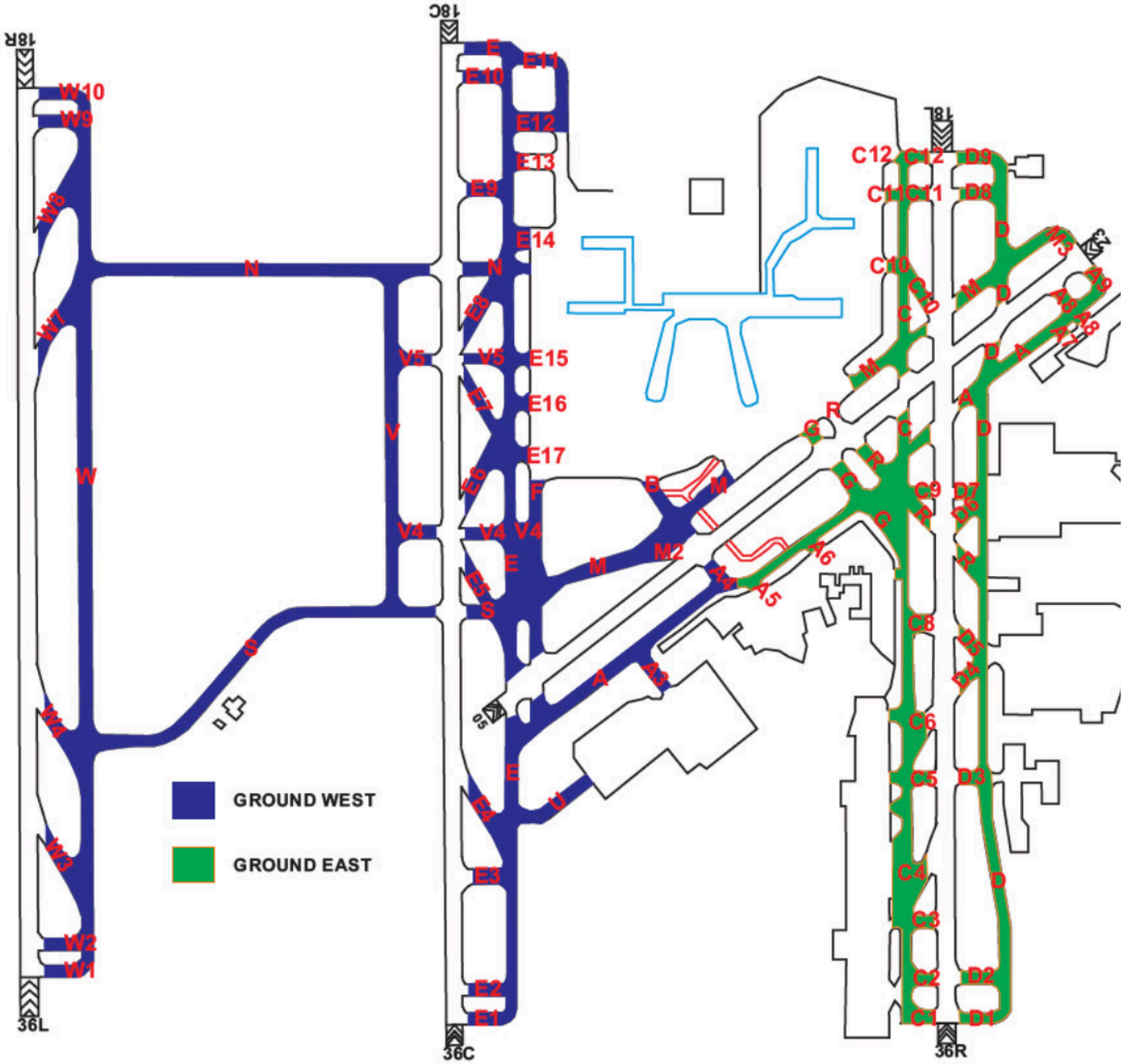
Section 3. Ground Control

3-3-1. AREA OF JURISDICTION

a. Ground Control area of jurisdiction is as depicted in Figure 3-4-1.

b. Ground Control West releases all taxiways west of 1R/19L to Local Control West.

Figure 3-4-1. Ground Control West/East Area of Jurisdiction



3-3-2. CLEARANCE AMENDMENTS TO TAXIING AIRCRAFT

Upon being advised by Clearance Delivery or Traffic Management Coordinator that an aircraft requires an amendment to their clearance, position the aircraft in a manner to maximize taxiway usage for non-affected aircraft, and advise the pilot to return to the Clearance Delivery frequency.

3-3-3. SEQUENCING AND RUNWAY USE PLAN

a. To assist Atlanta Center, to the extent practical sequence departing aircraft by alternating their SIDs, unless operationally disadvantageous.

b. When departure demand dictates, assign runways in accordance with the Runway Use Plan described in Appendix E to maximize departure flow, unless operationally disadvantageous. During a push, Ground Control will advise the Tower CIC of aircraft not taxied according to the Runway Use Plan. The request shall include callsign, DTA/SID, and runway. Example: *"American 123, BOBZY, runway 18."*

3-3-4. OTHER RESPONSIBILITIES

a. Ensure that departures are in receipt of the current departure ATIS code.

b. Ensure that all aircraft taxiing on the ramps, taxiways, and runways are operating with their transponder squawking altitude and assigned beacon code.

c. Obtain approval from the appropriate Local Control position prior to taxiing a departure to a location other than the approach end of the runway for departure. This request shall include the call sign of the aircraft and the specific intersection requested. By-pass taxiways are exempt, which are any taxiways 500ft or less from the approach end of the runway. Mark all flight strips with the assigned intersection other than the approach end.

d. When a runway crossing has been initiated or directed by the Tower CIC, Ground Controller must advise the CIC when the crossing operation is complete. Otherwise, advise the appropriate Local Control position who initiated or approved the crossing.

3-3-5. KNOWN SCENERY DISCREPANCIES

Due to the rapid expansion of the Charlotte-Douglas International Airport, there may be users that are utilizing outdated sceneries. Controllers should be advised of scenery discrepancies, as listed in Appendix A.

Section 4. Local Control

3-4-1. AREA OF JURISDICTION

a. Local Control East must be responsible for arrivals and departures on Runway 18/36.

b. Local Control Center must be responsible for arrivals and departures on Runway 19L/1R.

c. Local Control West must be responsible for arrivals and departures on Runway 19R/1L. The taxiways between 19R/1L and 19L/1R are released to Local Control West from Ground Control.

d. Local Control is designated the airspace within 7DME of the CLT VOR from surface to 4,000ft. See Figure 3-5-1 and 3-5-2.

Figure 3-5-1.
North Operation - Local Control Airspace

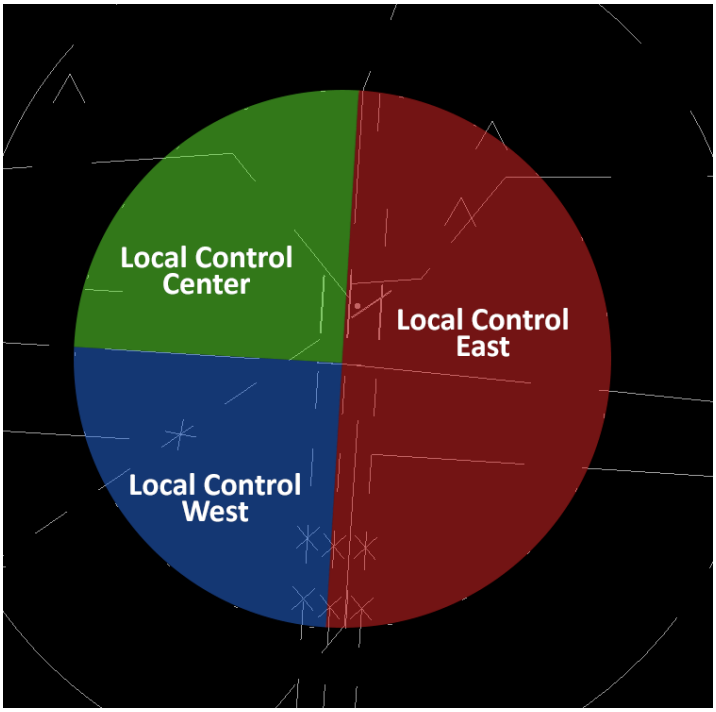
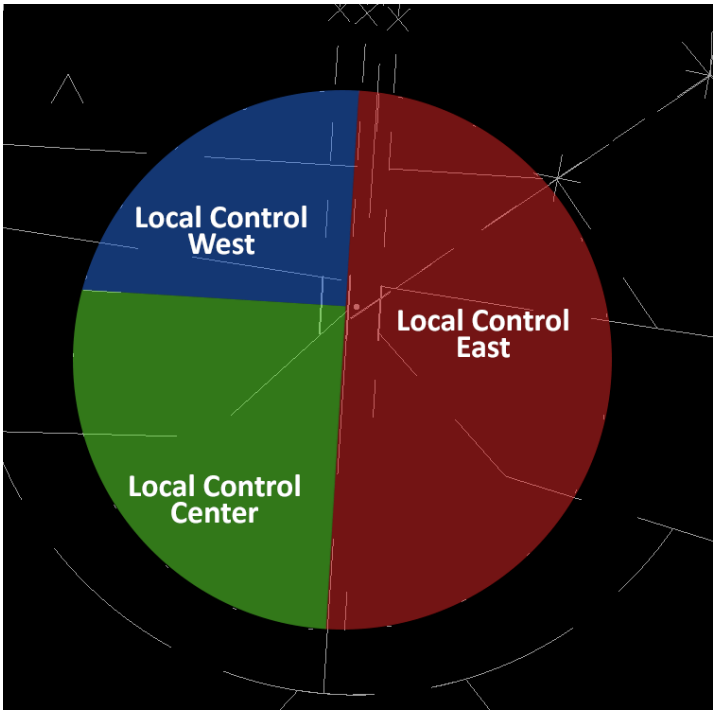


Figure 3-5-2.
South Operation - Local Control Airspace



3-4-2. CROSSING COORDINATION WITH GROUND CONTROL

a. If conditional phrases are used when approving a clearance to cross an active runway, the condition shall be stated first. Only one condition may be issued when authorizing a runway crossing.

b. An example of an appropriate clearance to cross an active runway is: "Behind AAL123, cross Runway 23 at taxiway golf twice and taxiway alpha-four twice."

3-4-3. COORDINATION BETWEEN LOCAL CONTROL POSITIONS

a. Local Control East and Local Control Center must advise Local Control West of all westbound prop departures. Local Control East/Center must retain westbound prop departures on their respective frequencies until these aircraft are clear of all potential conflicts for runway 1L/19R. During periods when there is an increased likelihood of go-arounds from runways 1L/19R, Local Control East/Center must delay the westbound turn of westbound prop aircraft to reduce the potential for conflict with possible go-around traffic from runway 1L/19R.

b. On a north operation, Local Control Center must inform Local Control East that there is a KRITR or NALEY prop departure by stating "NORTH PROP." Local Control East must acknowledge with a "NORTH PROP" reply. ***NOTE-*** *1R north props will be assigned heading 360, which will not always provide divergence with 36 departures.*

c. All aircraft departing a runway not consistent with the current Runway Use Plan must be coordinated between the appropriate Local Control and Departure Control positions.

3-4-4. COORDINATION BETWEEN LOCAL CONTROL AND DEPARTURE/SATELLITE

a. Aircraft departing the active runway are automatically released with the appropriate Departure/Satellite controller, with the following exceptions that require individual coordination:

   i. Runway 1L/19R departures.

   ii. SVFR departures (helicopters).

   iii. Opposite direction departures.

b. All aircraft departing a runway not consistent with the current Runway Use Plan must be coordinated between the appropriate Local Control and Departure Control positions.

c. Forwarding of the flight strip to Departure/Satellite constitutes a rolling call. If track is not observed to have been acquired within 3 miles of the departure end of the runway, coordinate with the appropriate departure controller.

3-4-5. TURBOJET NOISE ABATEMENT TRACKS

The Charlotte Airport has designated specific tracks to be flown by departing turbojets at all times. Aircraft must fly headings that ensure the following tracks until 2 miles from the departure end of the runway.

NOTE: *The 18, 19L noise tracks are the same, but simultaneous departures are authorized. See paragraph 3-4-7.*

Departure Runway	Noise Track
18/19L	Runway Heading
19R	200°
36	025°
1R	330°
1L	315°

3-4-6. PREDEFINED DEPARTURE HEADINGS

a. Predefined RNAV jet departure headings:

South Operation		
Departure Procedure	**Runway**	**Predefined Heading**
BOBZY, ESTRR, JOJJO, KRITR, WEAZL	18/19L/ 19R	240° after noise track
BEAVY, ICONS, KWEEN	18	Noise track
	19L	200° after noise track
	19R	Noise track
BATTA, DURST, LILLS, IRVVV	18/19L/ 19R	140° after noise track
North Operation		
Departure Procedure	**Runway**	**Predefined Heading**
BOBZY, ESTRR	36	290° after noise track
	1R	Noise track
	1L	Noise track
JOJJO	36	310° after noise track
	1L/R	Noise track
KRITR, WEAZL	1R/36	360° after noise track
	1L	Noise track
BEAVY, ICONS, KWEEN	1L/1R/36	Noise track
BATTA, DURST, LILLS, IRVVV	36	Noise track
	1L/R	070° after noise track

b. Predefined non-RNAV jet departure headings:

South Operation		
Departure Procedure	**Runway**	**Predefined Heading**
PEKNN, BRCHM, LAMDE, LILLS	18/19L/ 19R	140° after noise track
NEANO, BOBZY, ESTRR, DEBIE, NALEY, KRITR	18/19L/ 19R	240° after noise track
HAMLN, KWEEN, BEAVY, ANDYS	18	Noise track
	19L	200° after noise track
	19R	Noise track
North Operation		
Departure Procedure	**Runway**	**Predefined Heading**
NEANO, BOBZY, ESTRR, DEBIE	36	290° after noise track
	1R	Noise track
	1L	315° after noise track
HAMLN, KWEEN, BEAVY, ANDYS	1L/R, 36	Noise track
NALEY, KRITR	1R/36	360° after noise track
	1L	070° after noise track
PEKNN, BRCHM, LAMDE, LILLS	36	Noise track
	1R	360° after noise track
	1L	070° after noise track

c. Predefined turboprop and prop departure headings:

Departure Direction	Runway	Predefined Heading
West (and all to CAE filed AOB 8,000)	ALL	270°
East	ALL	100°
KRITR, NALEY	ALL	360

3-4-7. SIMULTANEOUS TURBOJET DEPARTURES ON RUNWAY 18 AND 19L

Due to the required noise abatement tracks on 18 and 19L being the same (runway heading track), normal IFR separation cannot be ensured. CLT is authorized to use Waiver 98-T-60 to run simultaneous departures off of runway 18/19L under the following procedures.

i. All turbojet departures shall be advised of simultaneous departures. This requirement will be met through use of the ATIS.

ii. Local Control East/Center shall ensure that separation is not less than runway centerline, with no overlapping or touching of radar targets.

iii. Alternate headings will be issued to ensure that aircraft track the runway centerline and fly course divergent tracks. When such headings are in use, appropriate coordination must be effected between Local Control positions.

3-4-8. GO AROUND PROCEDURES

Local Control must establish and provide appropriate separation with other aircraft in the event of a go around or missed approach. Issue climb-out instructions to an aircraft on approach if the pilot executes a missed approach or go-around. If climb out does not ensure required separation, issue alternate instructions and coordinate with the appropriate radar sector.

NOTE 1 *– Usual instructions for a turbojet go around would be a climb to 4,000ft and, once clear of potential conflicts, assign a heading toward downwind. Then, coordinate with the appropriate Final Radar controller prior to issuing a frequency change.*

NOTE 2 *– Do not issue control instructions outside the TCP without approval from Final Radar.*

3-4-9. LINE UP AND WAIT (LUAW)

LUAW operations are authorized on all runways, pursuant to FAA JO 7110.65, 3-9-4 Line Up And Wait (LUAW), except when the ceiling is less than 800 feet or visibility is less than 2 miles.

3-4-10. ASDE-X

Charlotte-Douglas International Airport is equipped with ASDE-X. Controllers are authorized to issue a landing clearance while an aircraft is holding in LUAW position in accordance with FAA JO 7110.65, 3-9-4, Line Up and Wait (LUAW).

Chapter 4. TRACON

Section 1. Positions

4-1-1. TRACON POSITIONS AND FREQUENCIES

Position (STARS ID)	Frequency
Departure Radar West (W)	120.5
Departure Radar East (E)	124.0
Satellite Radar North (N)	134.75
Satellite Radar South (S)	120.05
Satellite Radar Concorde (Q)	128.32
Arrival Radar East (H)	126.15
Arrival Radar Northwest (U)	125.35
Arrival Radar Southwest (D)	135.6
Final Radar East (A)	127.7
Final Radar Center (M)	119.0
Final Radar West (F)	132.7
Traffic Management (TC)	199.997
TRACON CIC	

4-1-2. COMBINING THE TRACON

a. The TRACON CIC, if not standalone, may be assigned to any position.
b. The TRACON combines to Departure Radar West (W).

Section 2. Departure/Satellite Radar

4-2-1. DEPARTURE/SATELLITE RADAR AIRSPACE

Figure 4-2-1. North Operation - Departure Radar Airspace

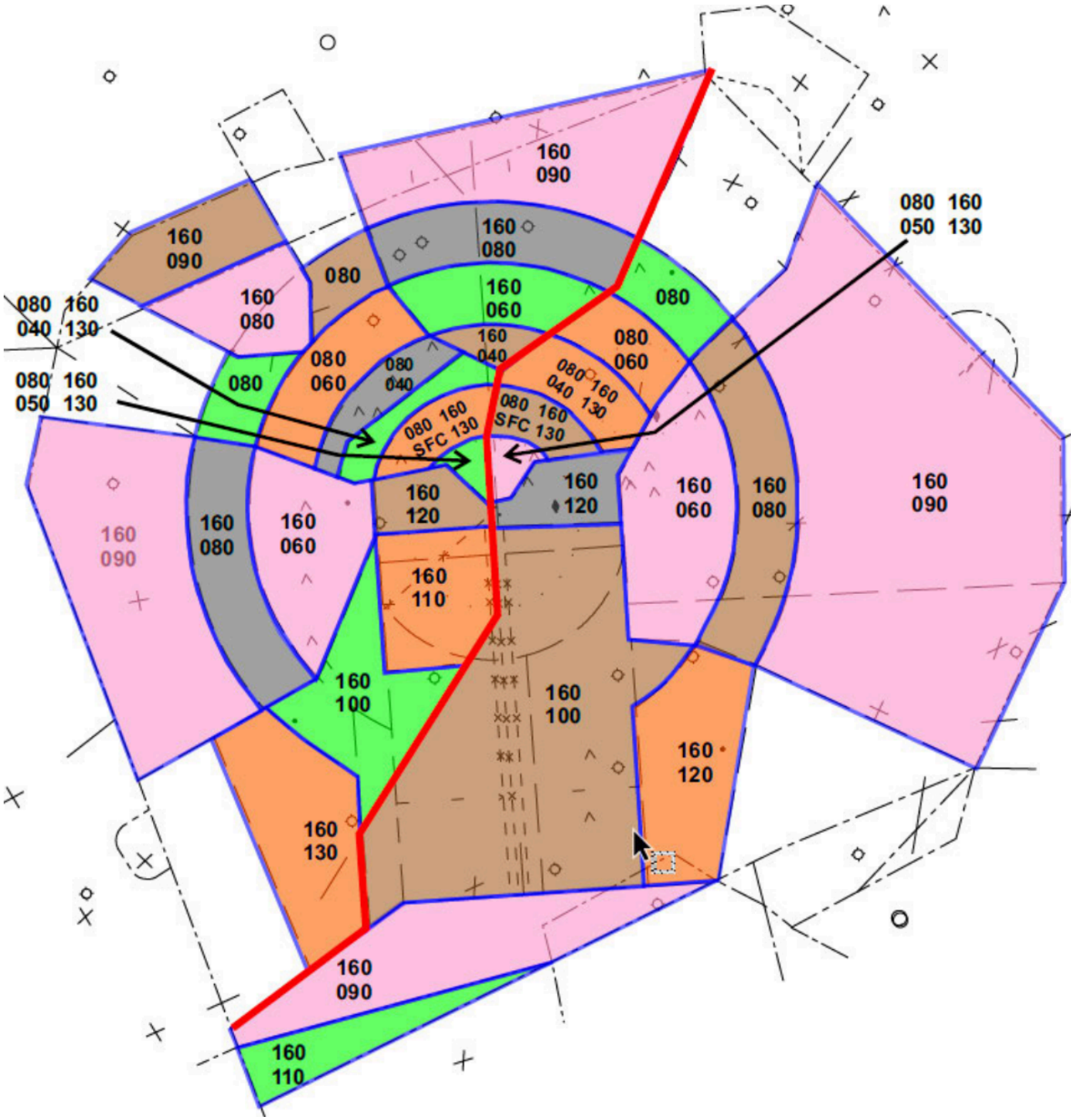


Figure 4-2-2. North Operation - Satellite Radar Airspace

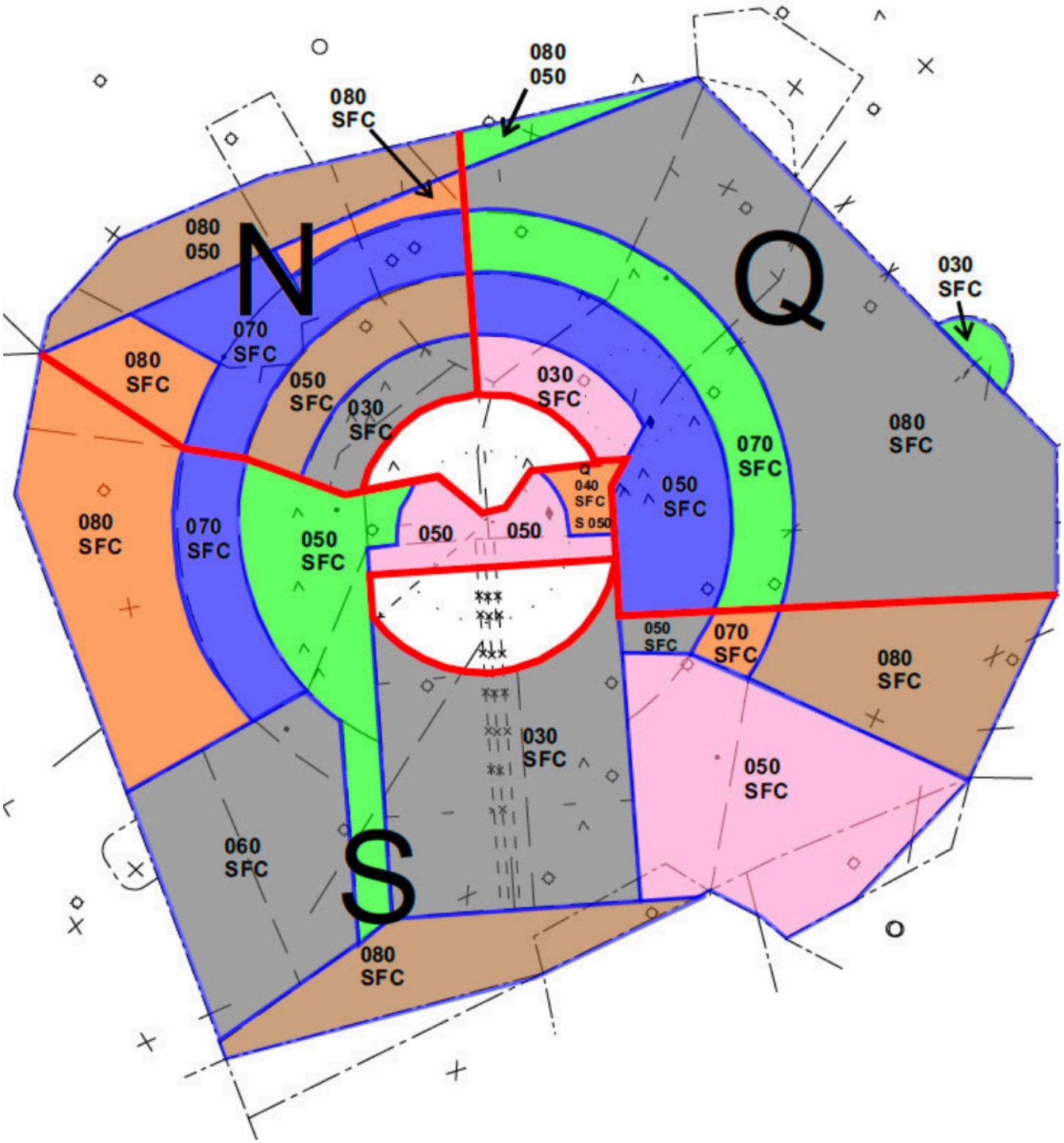


Figure 4-2-3. South Operation - Departure Radar Airspace

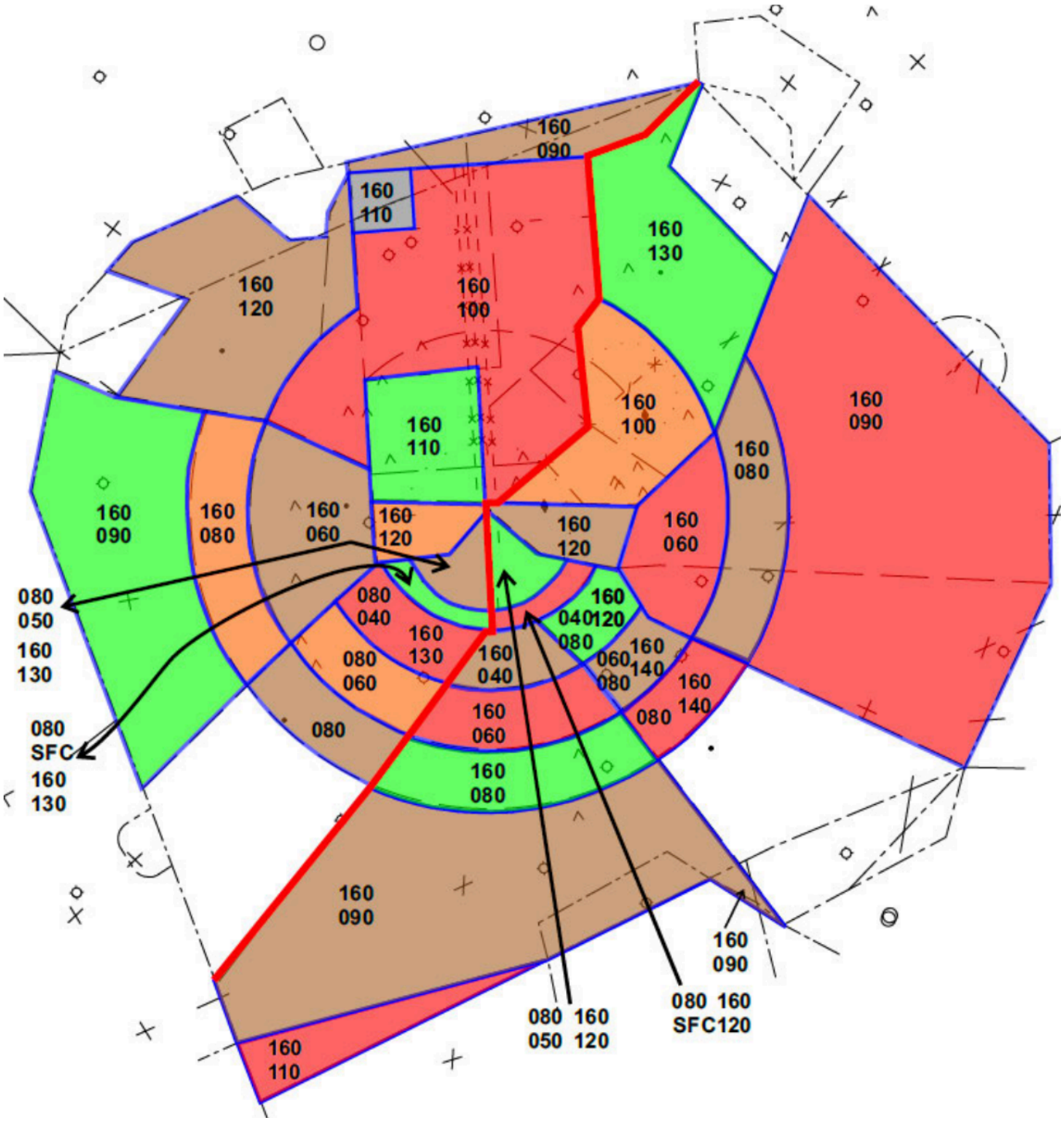
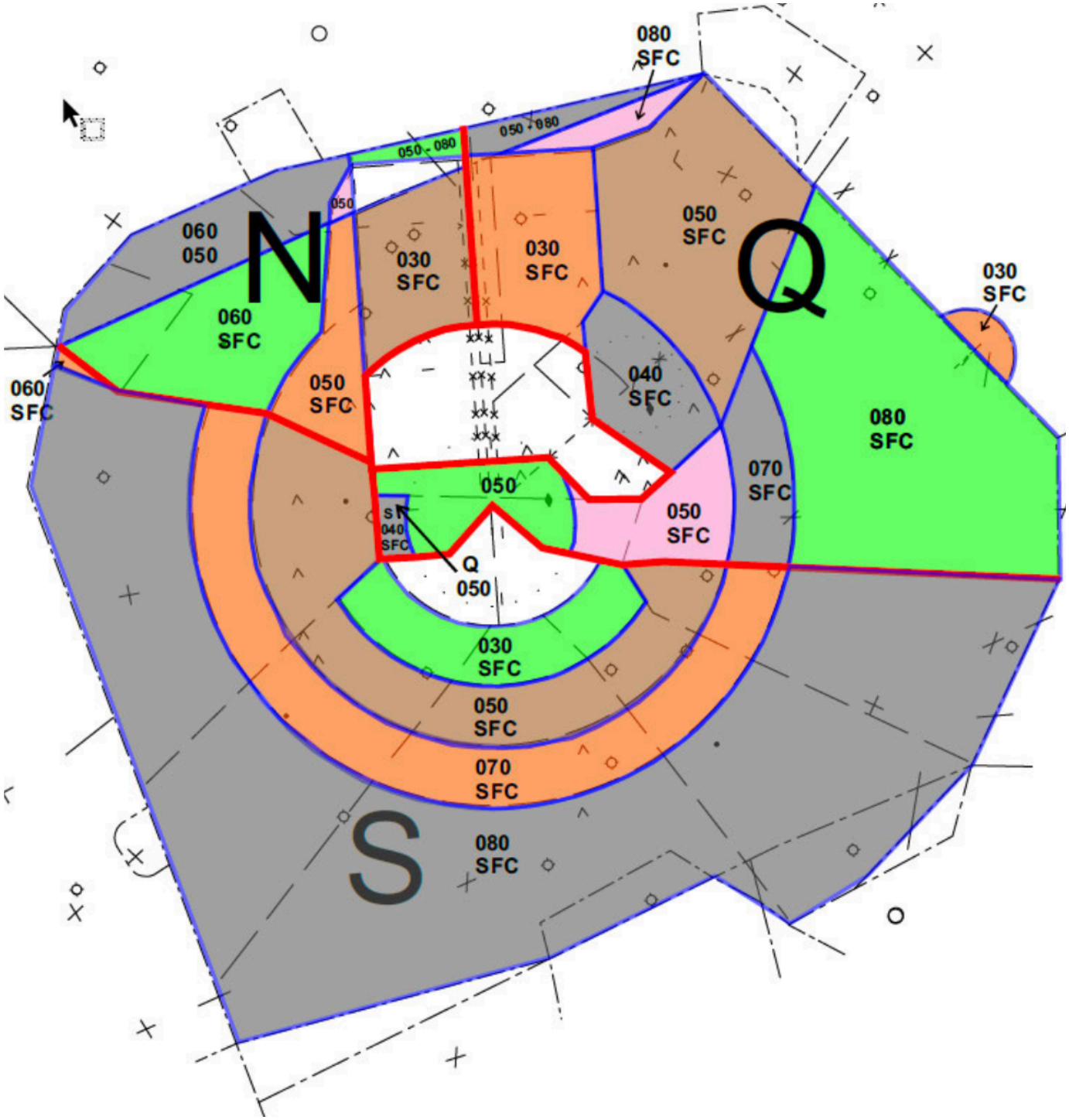


Figure 4-2-4. South Operation - Satellite Radar Airspace



4-2-2. POSITION COMBINATION/DE-COMBINATION

a. Departure Radar East (E) combines to/decombines from Departure Radar West (W).

b. Satellite Radar North (N) combines to/decombines from Satellite Radar South (S).

c. Satellite Radar Concord (Q) combines to/decombines from Satellite Radar North (N).

d. Satellite Radar combines to Departure Radar. N and S may be combined to W and/or E.

4-2-3. DEPARTURE RADAR WEST/EAST RESPONSIBILITIES

a. Provide standard separation and radar service to all aircraft within Departure Radar's delegated airspace as depicted in 4-2-1.

b. Departure Radar West is responsible for west and north departure transition areas (DTAs). Departure Radar East is responsible for south and east DTAs. If the tower assigns the South, Departure Radar West may be responsible for south DTA; see 4-2-6 SOUTH TRANSFER AREA.

c. Departure Radar must be cognizant of appropriate letters of agreement (LOAs) between CLT and surrounding facilities for both departure and overflight traffic. Atlanta Center (ZTL) overlies the airspace and surrounds it to the north and west. Other surrounding facilities include Jacksonville Center (ZJX), Washington Center (ZDC), and various approach controls.

4-2-4. SATELLITE RADAR RESPONSIBILITIES

a. Provide standard separation and radar service to all aircraft within Satellite Radar's delegated airspace as depicted in 4-2-1.

b. When simultaneous ILS or RNAV approaches are in use, vector IFR satellite arrivals landing at CLT at 5,000 feet from the west and from the east.

c. Vector VFR satellite arrivals landing at CLT at an appropriate VFR altitude.

d. The following procedures apply for the satellite airspace corridor over CLT:

   i. Satellite Radar Concord must assign VFR aircraft through the corridor east to west at 4,500, unless otherwise coordinated.

   ii. Satellite Radar South must assign all aircraft through the corridor west to east at 5,000, unless otherwise coordinated. ***NOTE:*** *Concord owns the corridor airspace. South should initiate a hand off in time for Concord to plan for opposite direction IFR traffic.*

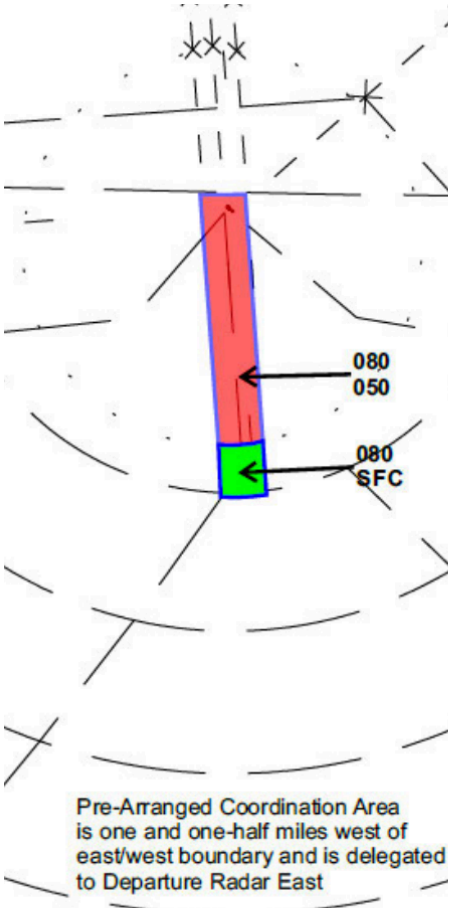
e. Prior to intrafacility handoff, place the destination or next fix in the scratchpad.

f. It shall be the responsibility of the first controller to establish communication with a satellite airport IFR arrival to advise that arrival of the approach information (ATIS code, weather information, type of approach to expect, etc) referenced in FAAO 7110.65 paragraph 4-7-10 (Approach Information).

4-2-5. DEPARTURE RADAR EAST/WEST PRE-ARRANGED COORDINATION AREA

a. Departure Radar East is authorized to control runway 19L departures inside of Departure Radar West airspace within the Pre-Arranged Coordination Area depicted in Figure 4-2-5. This is for runway 19L departures assigned east or south departure transition areas (DTAs).

Figure 4-2-5. Departure Radar East/West Pre-Arranged Coordination Area for Runway 19L Departures



4-2-6. SOUTH TRANSFER AREA

The South Transfer Area is established when the Tower CIC assigns the south DTAs (ICONS/BEAVY/KWEEN SIDs) to runway 19L/1R. The South Transfer Area changes the boundary between Departure Radar West/East and is depicted below (Figure 4-2-6 and 4-2-7). This configuration places 19L/1R southbound departures in Departure Radar West airspace.

Figure 4-2-6. South Operation - South Transfer Area

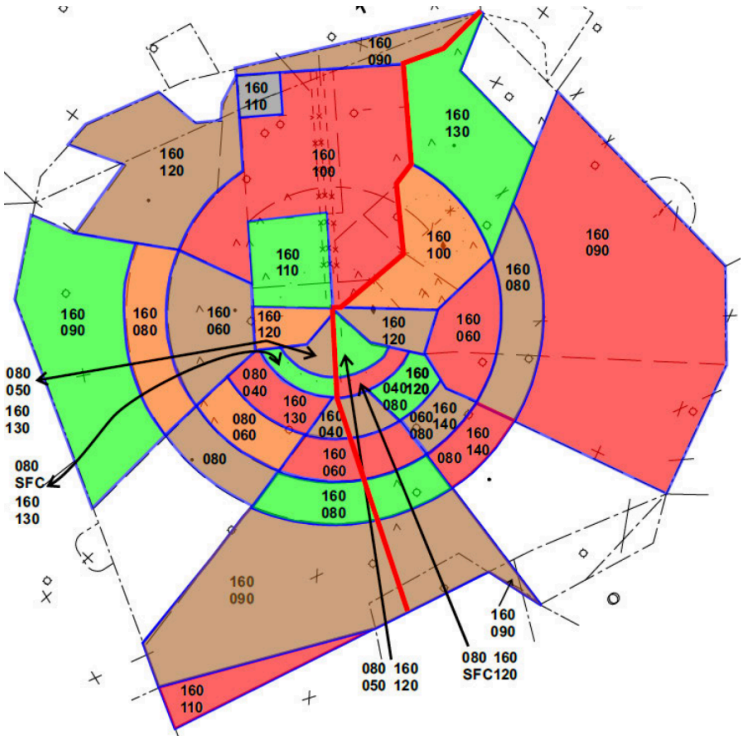
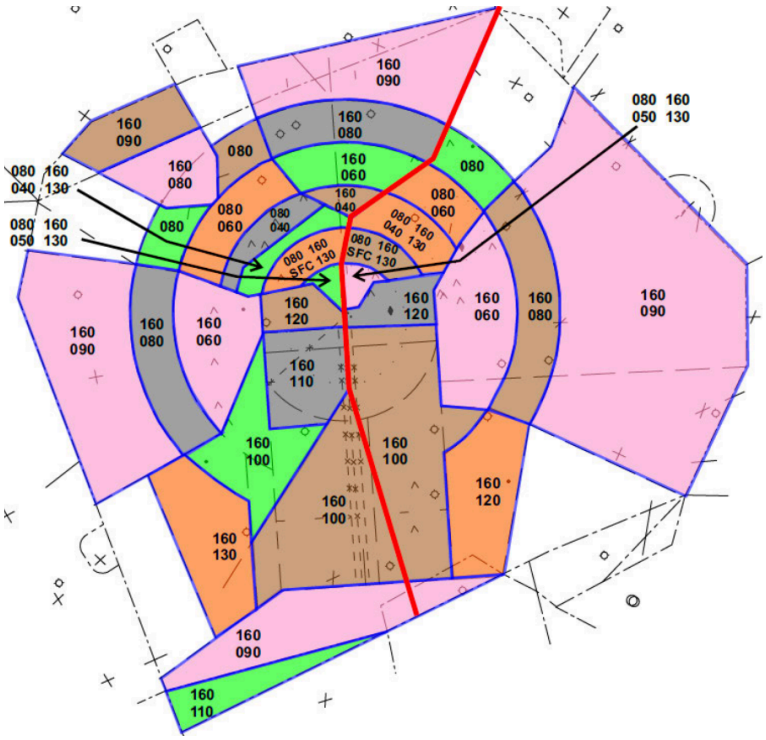


Figure 4-2-7. North Operation - South Transfer Area



4-2-7. DEPARTURE RADAR/ARRIVAL RADAR PRE-ARRANGED COORDINATION AREAS

a. See: 4-5-2. DEPARTURE RADAR AND ARRIVAL RADAR.

Section 3. Arrival Radar

4-3-1. AIRSPACE

Figure 4-3-1. North Operation - Arrival Radar Northwest/Southwest/East Airspace

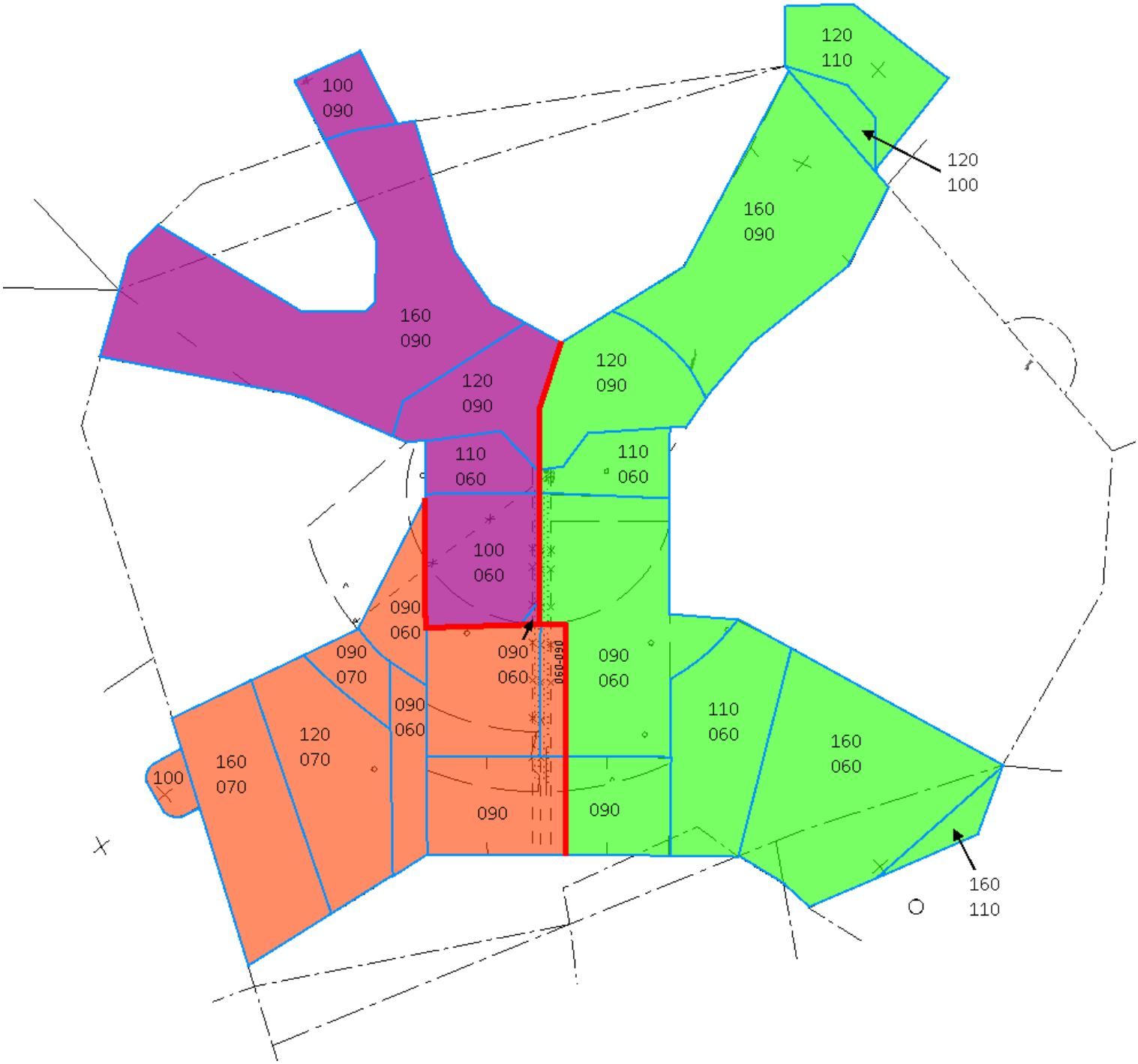
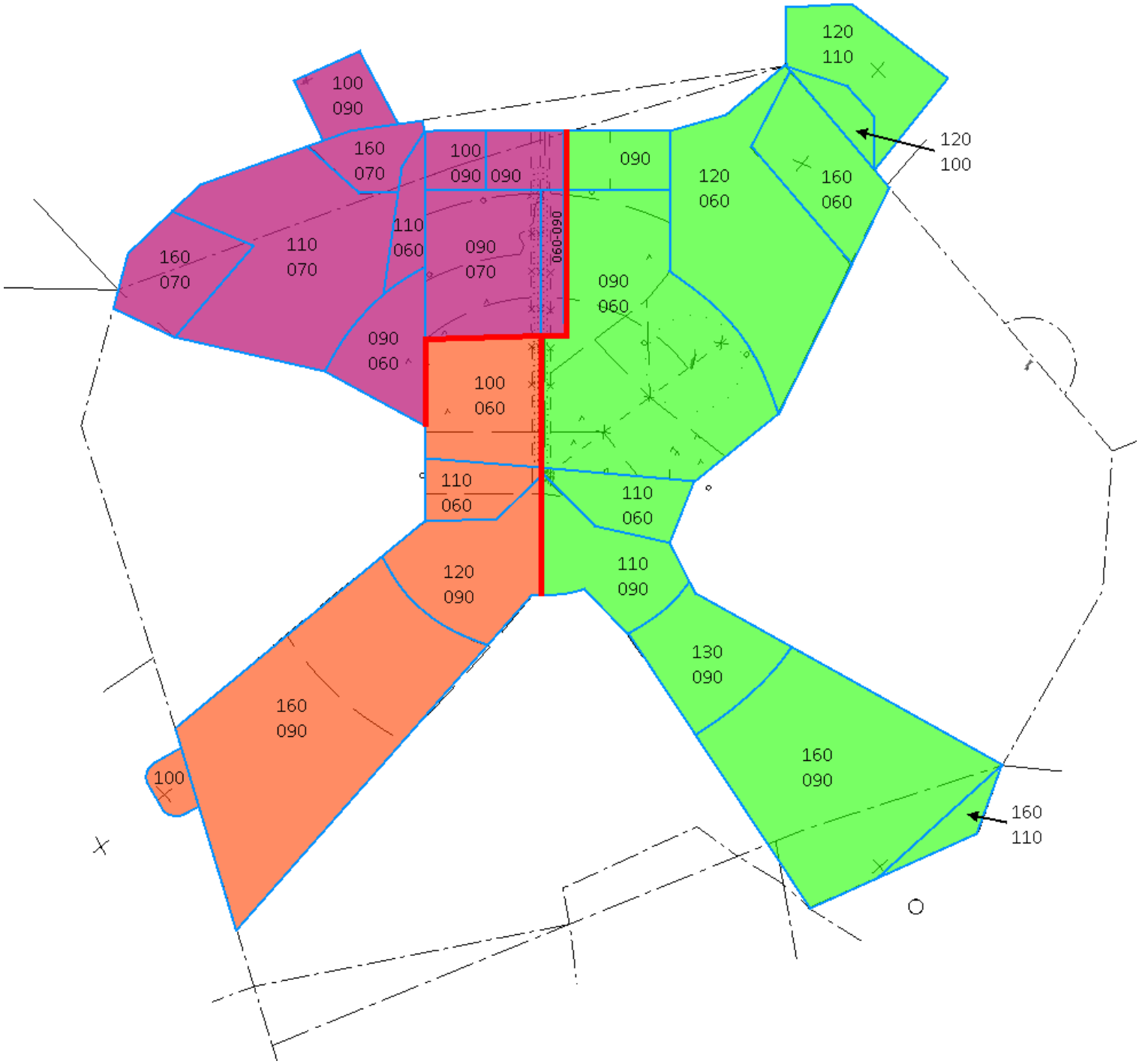


Figure 4-3-1. South Operation - Arrival Radar Northwest/Southwest/East Airspace



4-3-2. POSITION COMBINATION/DE-COMBINATION

a. Arrival Radar Northwest (U) shall combine to/de-combine from Arrival Radar East (H).

b. Arrival Radar Southwest (D) shall combine to/de-combine from Arrival Radar Northwest (U).

4-3-3. ARRIVAL RADAR EAST/NORTHWEST/SOUTHWEST RESPONSIBILITIES

a. Provide separation and radar service to all aircraft in Arrival Radar's delegated airspace as depicted in 4-3-1.

b. As soon as practical after receiving a handoff, ensure the scratchpad reflects the assigned runway.

c. Ensure aircraft have the current arrival ATIS code.

4-3-4. ARRIVAL RADAR FLOWS

a. Manage arrival routes, speeds, and altitudes so that the traffic enters the Final Radar controller's airspace at the appropriate point and speed (usually not greater than 210kts on downwind) to establish an orderly and efficient traffic flow. Unless otherwise coordinated, assign altitudes as follows:

i. Duals - 19R/18 or 19L/18 or 1L/1R or 1L/36

1. West runway
   - a. Base leg from west 7,000
   - b. Base leg from east 8,000
   - c. Downwinds 6,000
2. East runway
   - a. Base leg from west 7,000
   - b. Base leg from east 6,000
   - c. Downwinds 6,000

ii. Duals - 19R/19L or 1L/1R

1. West runway
   - a. Base leg from west 7,000
   - b. Base leg from east 6,000
   - c. Downwinds 6,000
2. East runway
   - a. Base leg from west 9,000
   - b. Base leg from east 8,000
   - c. West downwind 9,000
   - d. East downwind 8,000

iii. Trips - 19R/19L/18 or 1L/1R/36

1. West runway
   - a. Base leg from west 7,000
   - b. West downwind 6,000
2. Middle runway
   - a. Base leg from west 9,000 into "M" final box
   - b. Base leg from east 8,000 into "M" final box
   - c. West downwind
   - d. East downwind
3. East runway
   - a. Base leg from east 6,000
   - b. East downwind 6,000

4-3-5. ARRIVAL/FINAL RADAR AND ARRIVAL/DEPARTURE RADAR PRE-ARRANGED COORDINATION AREAS

See: Section 5. Pre-Arranged Coordination.

Section 4. Final Radar

4-4-1. AIRSPACE

Figure 4-4-1. North Operation - Final Radar West/Center/East Airspace

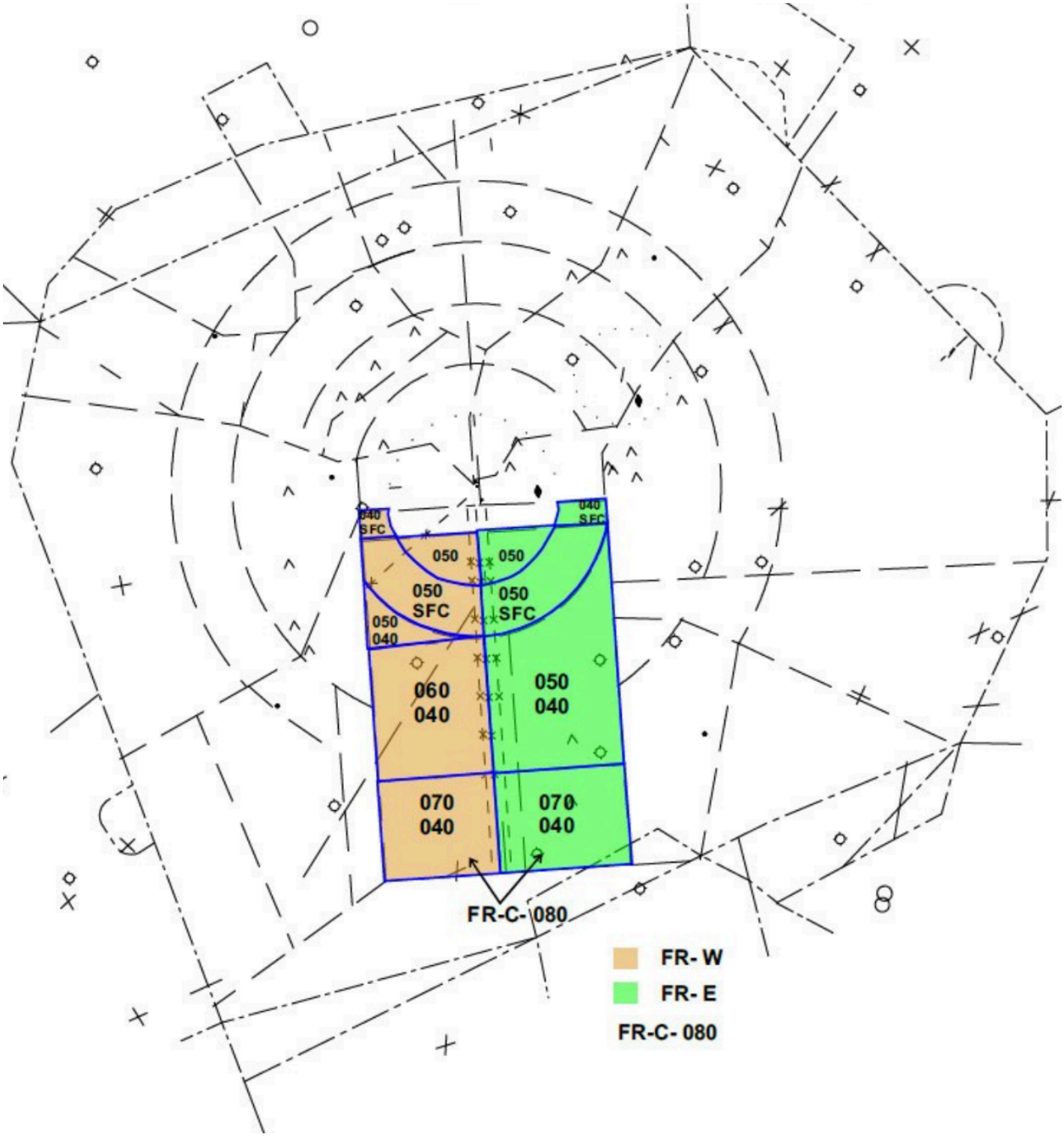
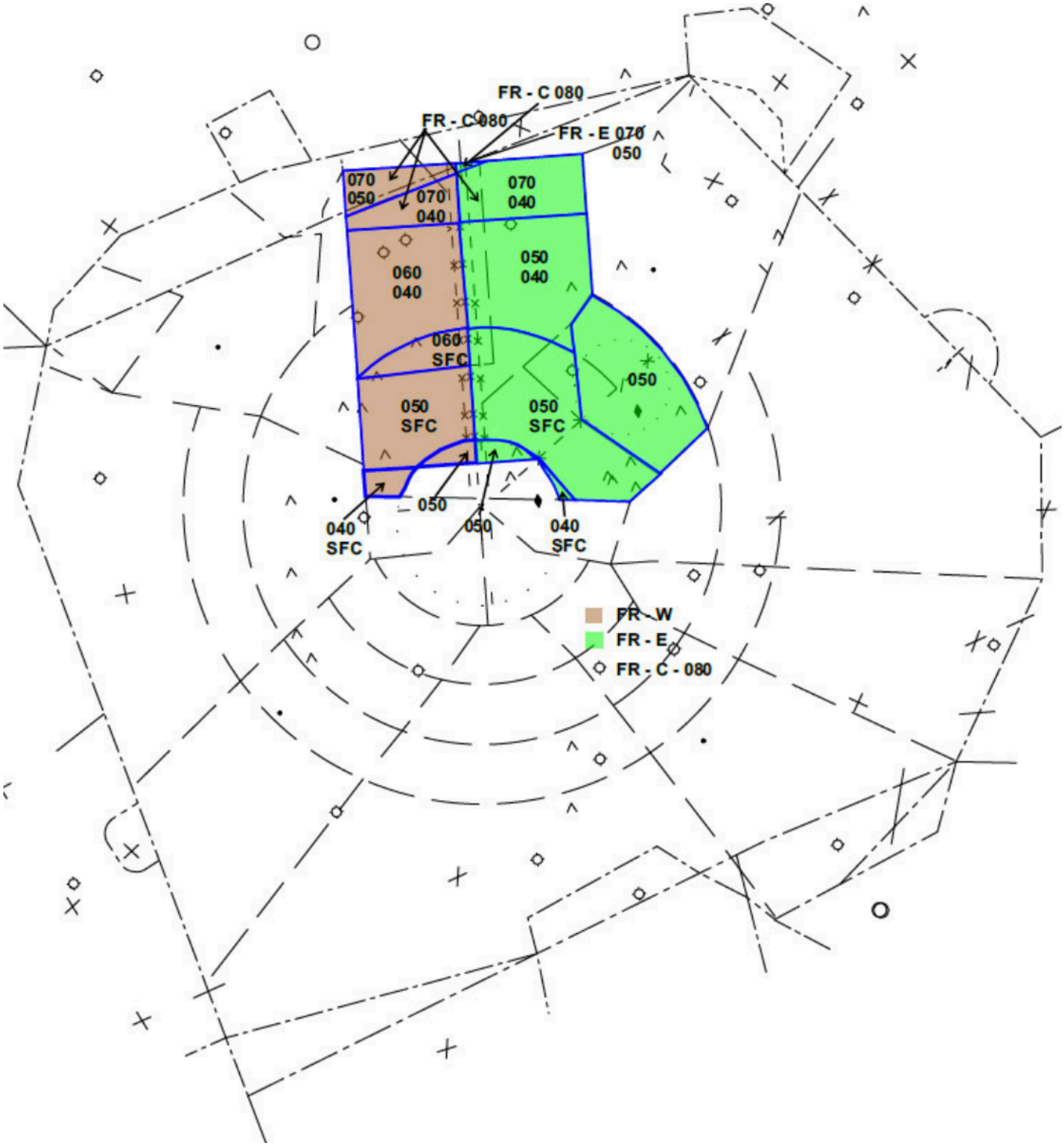


Figure 4-4-2. South Operation - Final Radar West/Center/East Airspace



4-4-2. POSITION COMBINATION/DE-COMBINATION

Final Radar West (F) and Final Radar Center (M) shall combine to/de-combine from Final Radar East (A).

4-4-3. FINAL RADAR WEST/CENTER/EAST RESPONSIBILITIES

a. Provide standard separation and radar service to all aircraft within Final Radar's delegated airspace depicted in 4-4-1. Local Control assumes separation responsibility at the TCP described in 2-3-1d.

b. In accordance with Chapter 2, Section 2, ensure all aircraft have the correct scratchpad.

c. Final Radar controllers must ensure that traffic on opposing base legs to the same or parallel runways are vertically separated until such time as the required lateral/longitudinal separation clearly exists.

   NOTE: *The intent of this requirement is to eliminate the practice whereby a final controller will attempt to turn in front of, behind, or between two arrivals without having vertical separation. Once required is established, the use of vertical separation may be discontinued.*

d. All traffic must be vectored to intercept the final approach course of the runway at an angle of 30 degrees or less, except during triple ILS/RNAV approaches. During triple ILS/RNAV approaches, traffic must be vectored to intercept at 20 degrees or less.

e. In triple operations, aircraft assigned runway 19L/1R must exit the "M" box established on the localizer at or above 8,000.

f. Final Radar positions are authorized to utilize the Mode C readout of traffic worked by the adjacent Final Radar position for vertical separation purposes.

g. All Final Radar positions must quick look all other Final Radar and Local Control positions.

4-4-4. FINAL RADAR ALTITUDE ASSIGNMENTS

a. During visual approaches, altitude assignments by Final Radar must normally be:

i. **Duals - 1L/36 or 1R/36 or 19R/18 or 19L/18**

1. A at or below 4,000
2. M/F 5,000 or above

ii. **Duals - 1L/1R or 19R/19L**

1. F at or below 5,000
2. M 7,000 or above

iii. **Trips - 1L/1R/36 or 19R/19L/18**

1. A 4,000
2. M 8,000
3. F 5,000 or 6,000

b. During simultaneous ILS/RNAV approaches, Final Radar positions shall ensure aircraft are established on the final approach course at the following capture points and altitudes except when using 1,000ft, 3NM, or visual separation.

i. Duals - North Operation

1. 1L/36 LONIA @ 5,000 / HEKAM @ 4,000
2. 1R/36 DENNE @ 5,000 / HEKAM @ 4,000
3. 1L/1R NUXXY @ 4,000 / KRISL @ 7,000

ii. Duals - South Operation

1. 18/19R CAVVI @ 4,000 / WOVEN @ 5,000
2. 18/19L CAVVI @ 4,000 / TOMME @ 5,000
3. 19L/19R LERDY @ 7,000 / NELLA @ 4,000

iii. Trips - North Operation

1. 36 HEKAM @ 4,000
2. 1R SOLM @ 8,000
3. 1L WELET @ 5,000 or the caret @ 6,000

iv. Trips - South Operation

1. 18 CAVVI @ 4,000
2. 19L JEDKO @ 8,000
3. 19R RUDKY @ 5,000 or the caret @ 6,000

4-4-5. REDUCED SEPARATION ON FINAL

Reduced longitudinal separation (2.5 miles inside of a 10-mile final) is authorized between aircraft established on the final approach course in accordance with FAA Order 7110.65 for runways 19R/1L, 19L/1R, and 18/36.

4-4-6. BEST OPERATING PRACTICES AND PROBLEM AREAS

a. It is recommended that the final radar west controller keep runway 1R/19L traffic at an altitude higher than the adjacent outboard final radar controllers. The purpose of this is to assist the outboard final radar controllers in obtaining visual approach clearances.

b. Final controllers should work the aircraft that have been assigned landing runways that are within their area of jurisdiction (e.g. F works all 1L/19R traffic, M all 1R/19L, A all 36/18).

c. Controllers must be aware of potential conflictions whenever non-standard altitude assignments are employed. In all cases where non-standard altitudes are used, coordination must be complete and timely.

4-4-7. FINAL RADAR/ARRIVAL RADAR PRE-ARRANGED COORDINATION AREA

See: 4-5-3. FINAL RADAR AND ARRIVAL RADAR.

Section 5. Pre-Arranged Coordination

4-5-1. DEPARTURE RADAR WEST AND DEPARTURE RADAR EAST

See 4-2-5. DEPARTURE RADAR EAST/WEST PRE-ARRANGED COORDINATION AREA.

4-5-2. DEPARTURE RADAR AND ARRIVAL RADAR

a. A pre-arranged coordination area is established for traffic departing from within the Charlotte terminal area. Pre-arranged coordination may be applied within the airspace depicted in Figure 4-5-3 and 4-5-4. The following procedures apply:

   i. Departure Radar East may only use the procedure to penetrate Arrival Radar East airspace.

   ii. Departure Radar West may only use the procedure to penetrate Arrival Radar Northwest/Southwest airspace.

   iii. Departure Radar must provide radar separation, including appropriate wake turbulence separation, from all Arrival Radar traffic when utilizing this prearranged coordination area.

   Arrival Radar must advise Departure Radar of any point-outs or untagged/untracked targets.

b. The Mode C readout of an aircraft under another controller's jurisdiction may be used for separation purposes while aircraft are within the pre-arranged coordination area.

Figure 4-5-3. North Operation - Departure/Arrival Radar Pre-Arranged Coordination Area

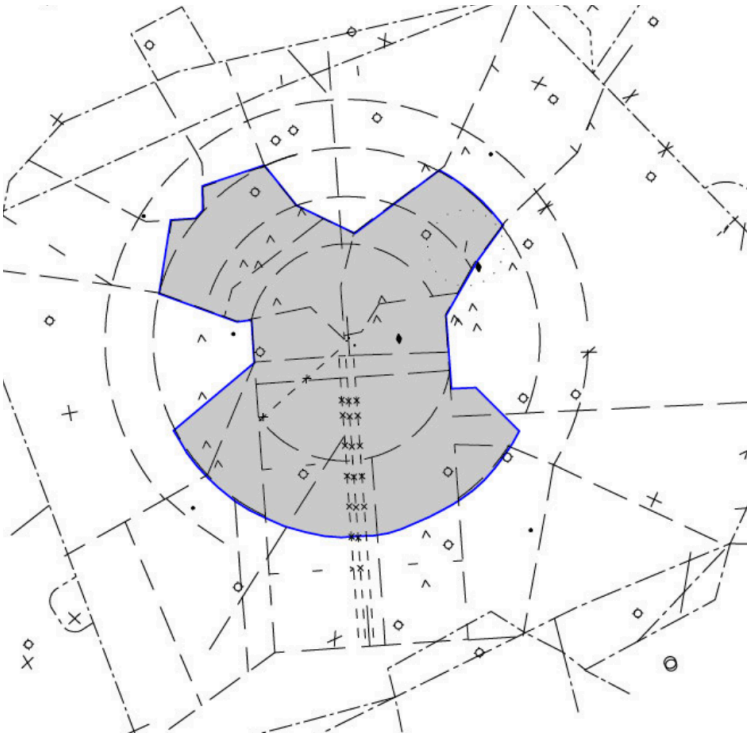
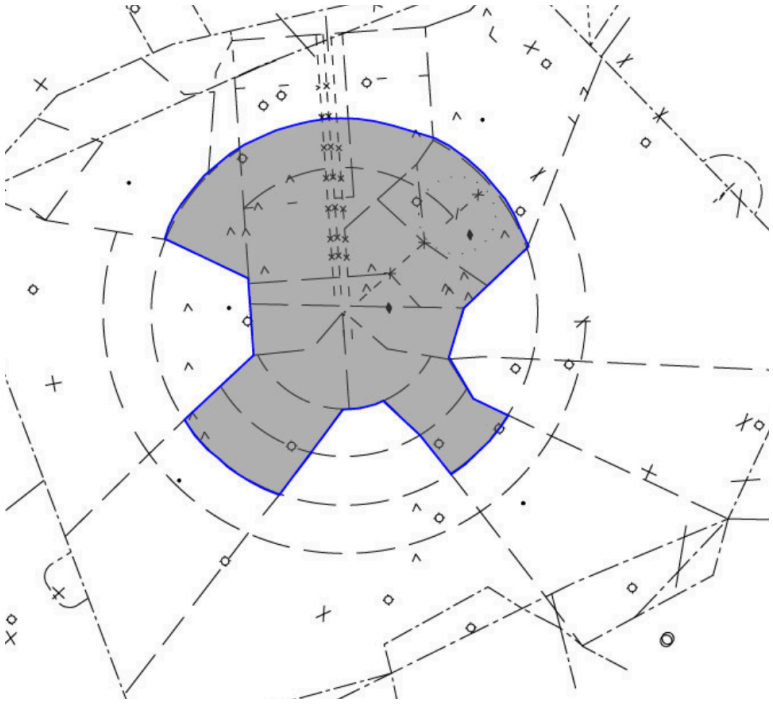


Figure 4-5-4. South Operation - Departure/Arrival Radar Pre-Arranged Coordination Area



4-5-3. FINAL RADAR AND ARRIVAL RADAR

a. A pre-arranged coordination area is established for traffic landing at KCLT. Pre-arranged coordination may be applied within the airspace depicted in Figure 4-5-3 and 4-5-4. The following procedures apply:

   i. Arrival Radar East may only penetrate Final Radar Center airspace without individual coordination utilizing the east final pre-arranged coordination area.

   ii. Arrival Radar Northwest/Southwest may only penetrate Final Radar Center airspace without individual coordination utilizing the west final pre-arranged coordination area.

   iii. Arrival Radar must provide radar separation, including appropriate wake turbulence separation, from all Final Radar Center traffic when utilizing this prearranged coordination area.

   iv. Final Radar Center must advise Arrival Radar of any point-outs or untagged/untracked targets.

b. The Mode C readout of an aircraft under another controller's jurisdiction may be used for separation purposes while aircraft are within the pre-arranged coordination area.

Figure 4-5-3. North Operation - Final/Arrival Radar Pre-Arranged Coordination Area

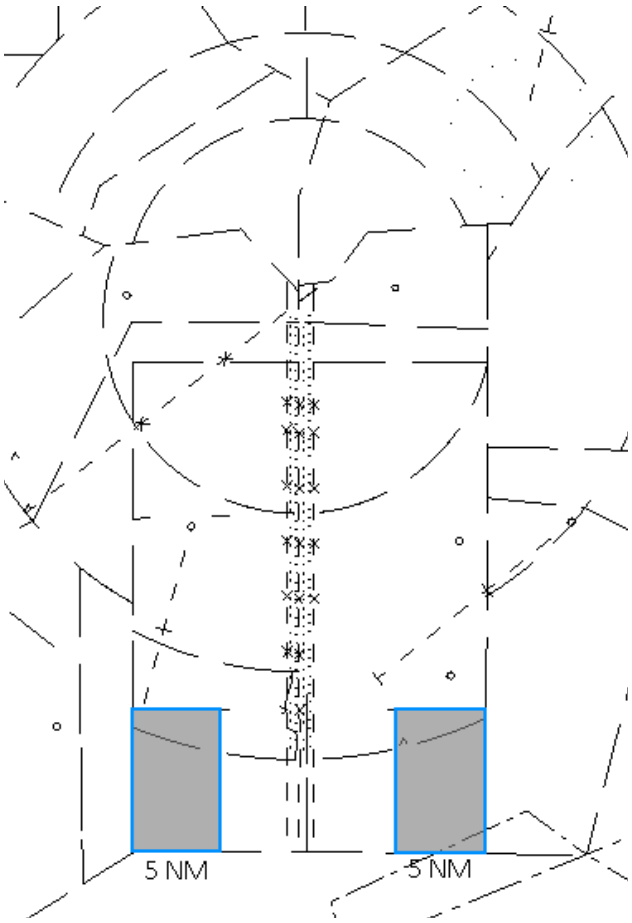
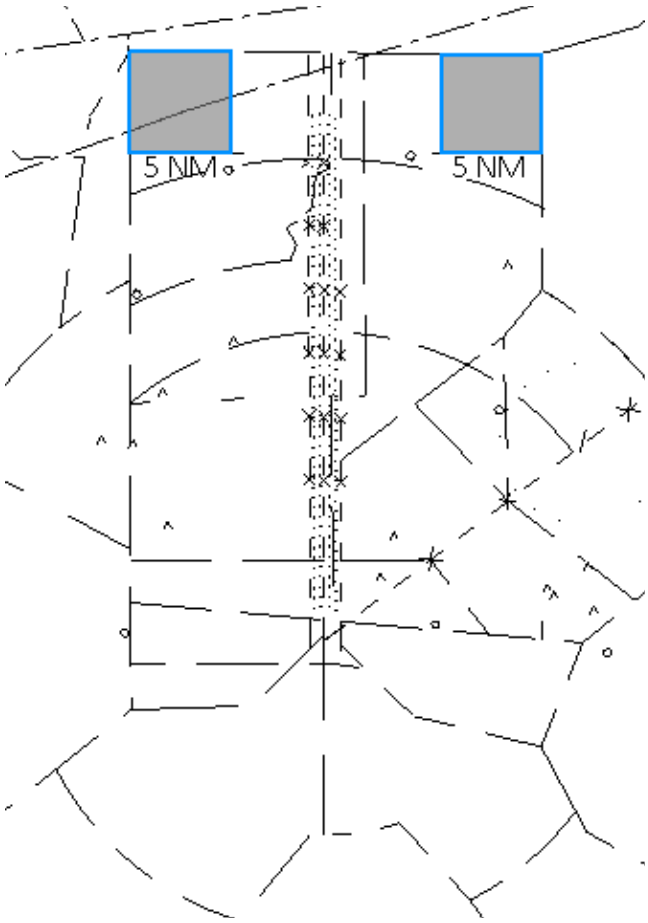


Figure 4-5-4. South Operation - Final/Arrival Radar Pre-Arranged Coordination Area



Appendices

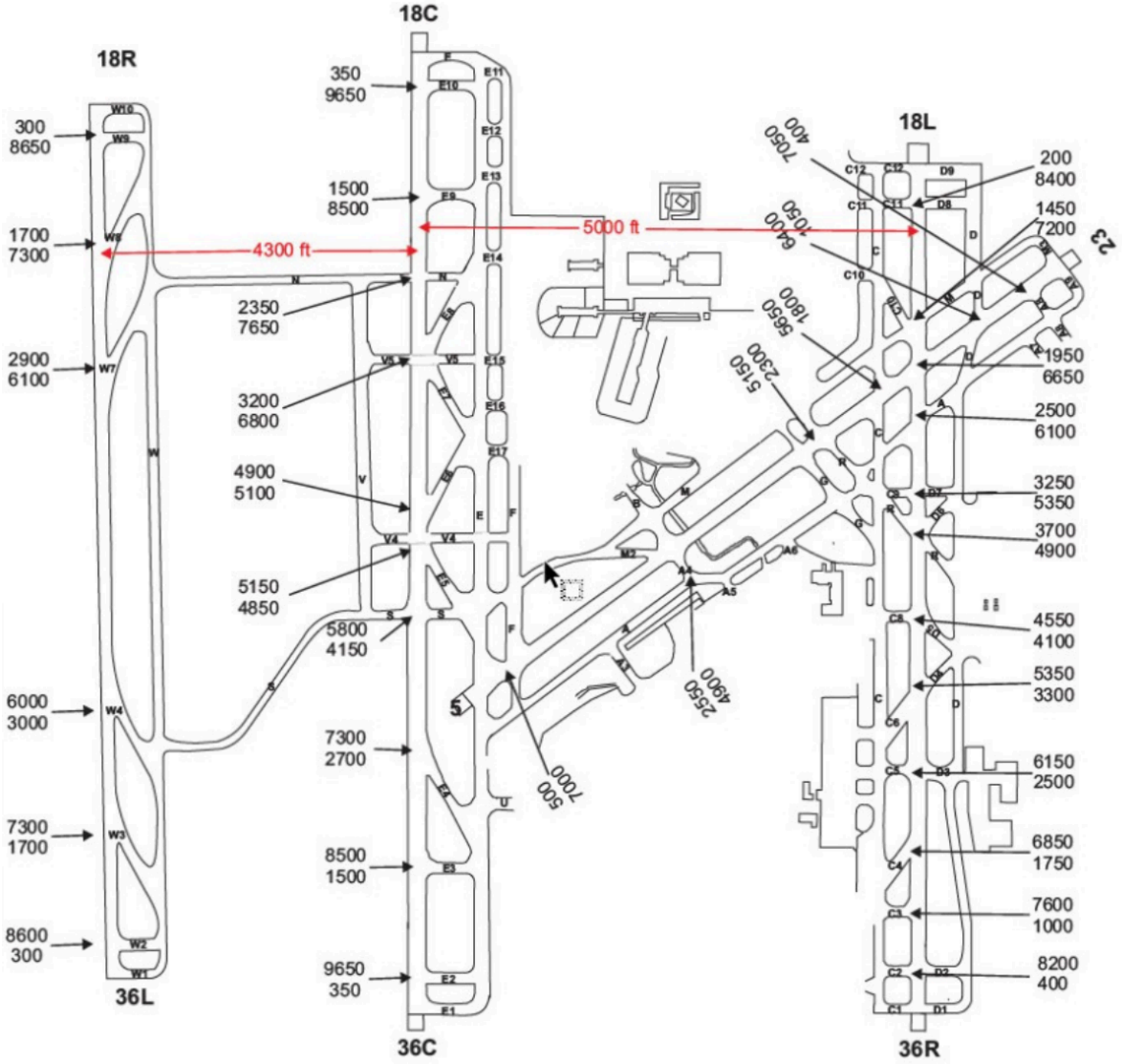
Appendix A. Discrepancies Between Sceneries

Runway 5/25 has been replaced with taxiway J.

Runway 36L/18R, Runway 36C/18C, and Runway 36R/18L has been replaced with Runway 1L/19R, Runway 1R/19L, and Runway 36/18 respectively.

A majority of the taxiways names have been changed around the airfield leading to incorrect taxiways signs.

Appendix B. Available Takeoff Distances



Appendix C. Controller Relief Briefing Checklist

C-1. FLIGHT DATA/CLEARANCE DELIVERY AND GROUND CONTROL RELIEF BRIEFING CHECKLIST

1) Status Information Areas: Applicable IDS and PIREP page, etc.
2) Equipment Status: AFV, ATIS, etc.
3) Staffing: Departure/Satellite Radar split, tower cab staffing (including Tower CIC).
4) Airport Conditions: Airspace configuration, runways in use, runway/taxiway closures, etc.
5) Airport Activities: Gate hold procedures, braking action reports, etc.
6) Weather: Trends, Windshear, ATIS, PIREPs, SIGMETs, AIRMETs, etc.
7) Flow Control: Call for release (CFR/APREQs), etc.
8) Special Activities: Events, etc.
9) Special Instructions: Coordination, CIC instructions, etc.
10) Training in Progress.
11) Traffic Information.
    a) *Ground Control.* Aircraft on the movement area/cleared onto the movement area.
    b) *Clearance Delivery.* PDC/CPDLC eligible flight plans which have not yet been sent a PDC or CPDLC.
    c) Aircraft standing by.
    d) Coordination agreements with other positions.

NOTE: *There must be at least a 4 minute overlap during each position relief briefing: a minimum of 2 minutes prior to receiving the briefing and a minimum of 2 minutes at the end of the briefing. At the beginning of the 2 minutes prior to the briefing, the relieving controller must be monitoring the frequency. Upon completion of the briefing, the controller relieved must monitor the frequency for 2 minutes.*

C-2. GROUND AND LOCAL CONTROL RELIEF BRIEFING CHECKLIST

1) Status Information Areas: Applicable IDS and PIREP page, etc.
2) Equipment Status: AFV, ATIS, etc.
3) Staffing: Departure/Satellite Radar split, Final Radar split, tower cab staffing (including Tower CIC).
4) Airport Conditions: Airspace configuration, Runway(s) in use, runway/taxiway closures, etc.
5) Airport Activities: Gate hold procedures, braking action reports, etc.
6) Weather: Trends, Windshear, ATIS, PIREPs, SIGMETs, AIRMETs, etc.
7) Flow Control: Special programs, reportable CLT delays, etc.
8) Special Activities: Events, Evaluations, Emergency, etc.
9) Special Instructions: Coordination, CIC instructions, LUAW, LAHSO, etc.
10) Training in Progress.
11) Verbally State Runway Status: Unavailable, closed, or occupied.
12) Traffic Information:
    a) Status of each aircraft.
    b) Point-outs.
    c) Aircraft affected by Traffic Management Initiatives.
    d) Coordination agreements with other positions.
    e) Aircraft holding or standing by for service.

NOTE: *There must be at least a 4 minute overlap during each position relief briefing: a minimum of 2 minutes prior to receiving the briefing and a minimum of 2 minutes at the end of the briefing. At the beginning of the 2 minutes prior to the briefing, the relieving controller must be monitoring the frequency. Upon completion of the briefing, the controller relieved must monitor the frequency for 2 minutes.*

Appendix D. Departure Flight Strip Marking

PDT4487	5313	KCLT KTYS	KCLT BOBZY4 BOBZY BRAYN	10	11	12
CRJ7/L	P0000		REWET VXV KTYS	13	14	15
714	160		○"PIEDMONT"	16	17	18

1 Aircraft ID	**5** Beacon code	**8** Destination	**9** Route
3 Aircraft type/suffix	**6** Proposed departure time		
4 CID (auto)	**7** Expected altitude		**9A** Remarks*

10 Reported ATIS	**11** Optional	**12** CFR time**
13 Clearance***	**14** Intersection	**15** Runway
16 Departure ID	**17** Optional	**18** Optional

* Remarks as follows:

FRC - Full Route Clearance

FRC/XXX - Full Route Clearance issued up to a particular fix (XXX).

CDR CLTLXXXYY - A coded departure route has been utilized. XXX indicates the arrival field IATA, YY indicates the departure fix.

EDCT XXXX - EDCT time when issued by ZTL. Aircraft must depart within 5 minutes before/after the EDCT.

** Call For Release (CFR) release time issued by ZTL. Aircraft must depart within 2 minutes before/1 minute after the time.

*** Check mark (SHIFT + /) for verbal readback. "X" for PDC sent. "W" for CPDLC "W" (WILCO) received.

Appendix E. Runway Use Plan

a. When departure demand is high, Ground Control should make all efforts to assign the following runways for the corresponding departures. Coordinate with the Tower CIC for aircraft not assigned departures.
b. The Tower CIC may amend the runway use plan according to departure demand. The Tower CIC must ensure the tower cab and TRACON CIC are aware of an amended runway use plan.

E-1. RNAV TURBOJET DEPARTURES

***NOTE** – See appendices E-3 and E-4 for a visual representation.*

Departure Procedure	Runway
BEAVY, ICONS, KWEEN, BATTA, DURST, LILLS, IRVVV	18/36
BOBZY, ESTRR, JOJJO, KRITR, WEAZL	19L/1R

E-2. NON-RNAV TURBOJET DEPARTURES

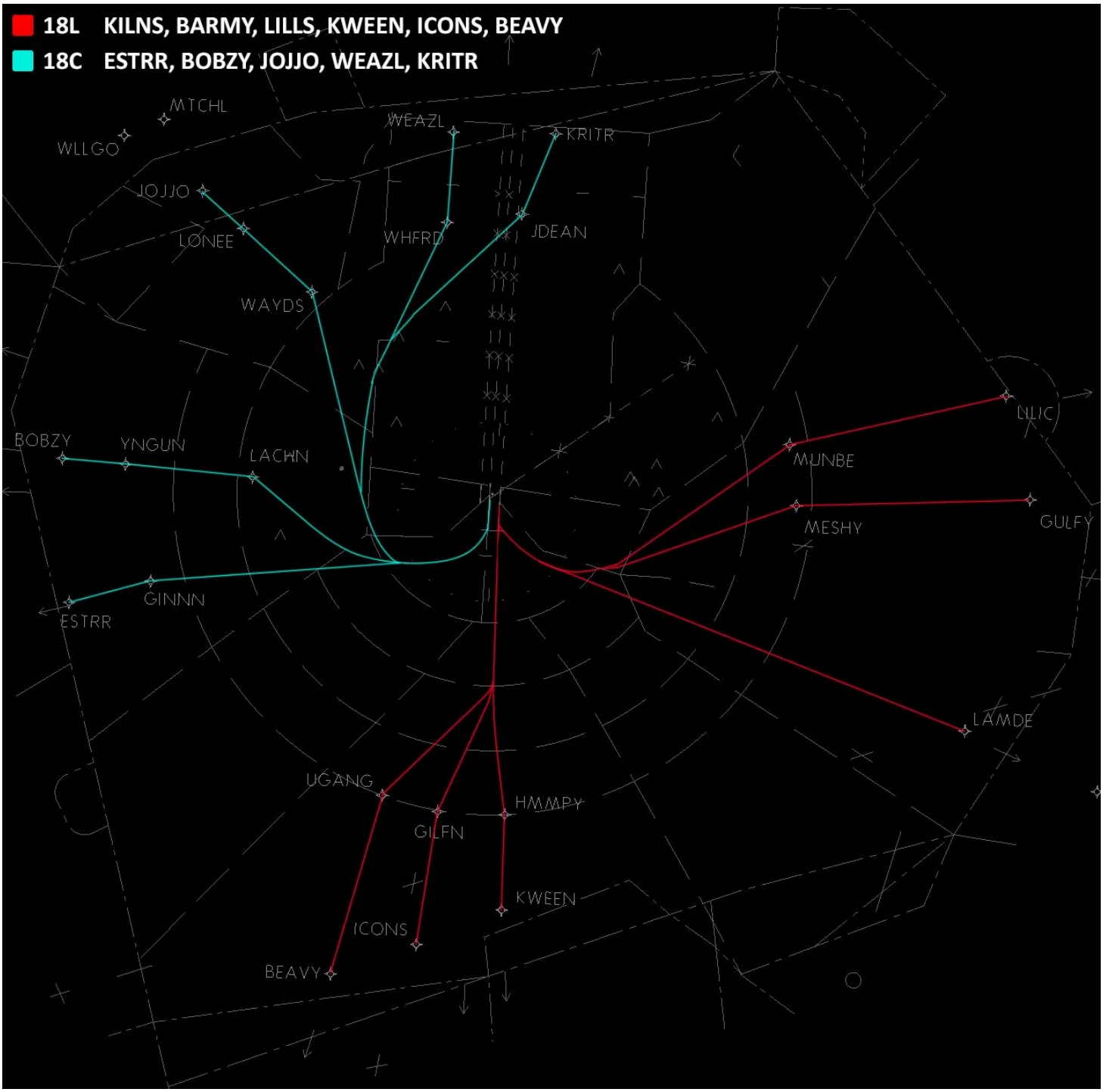
For the CHARLOTTE departure, with the exception of propeller driven aircraft, assign north and west departures runway 1R/19L and south and east departures runway 18/36.

North/West	NALEY, KRITR, BOBZY, ESTRR, DEBIE, NEANO
South/East	HAMLN, KWEEN, BEAVY, ANDYS, BRCHM, PEKNN, LAMDE, LILLS

E-3. RNAV SID FLOWS (SOUTH OPERATION)

NOTE 1 *– Represents standard runway use plan.*

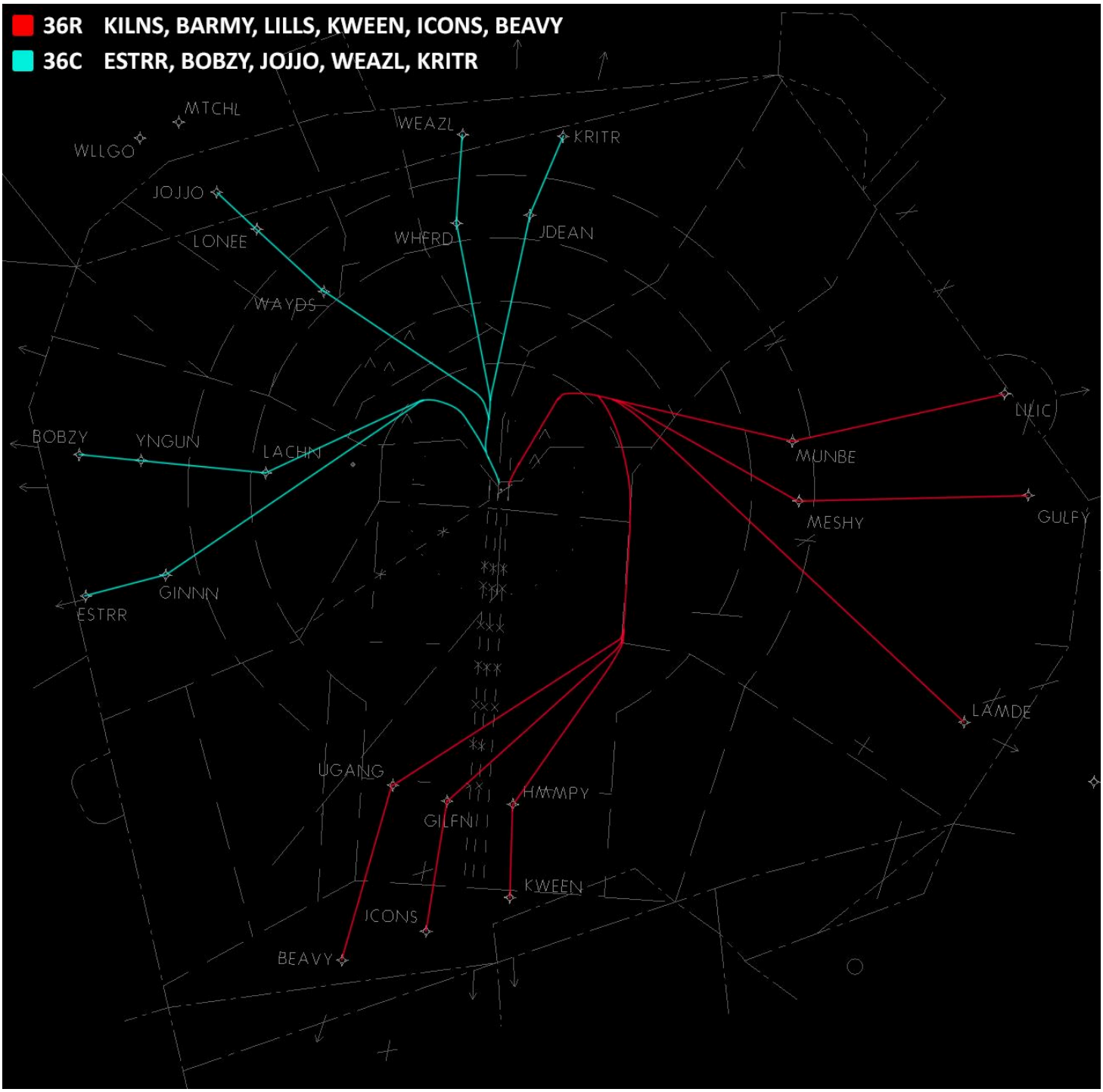
NOTE 2 *– As the SIDs are vectors and aircraft may join a given SID at various waypoints, these lines are only a general representation of the paths aircraft will take.*



E-4. RNAV SID FLOWS (NORTH OPERATION)

NOTE 1 *– Represents standard runway use plan.*

NOTE 2 *– As the SIDs are vectors and aircraft may join a given SID at various waypoints, these lines are only a general representation of the paths aircraft will take.*



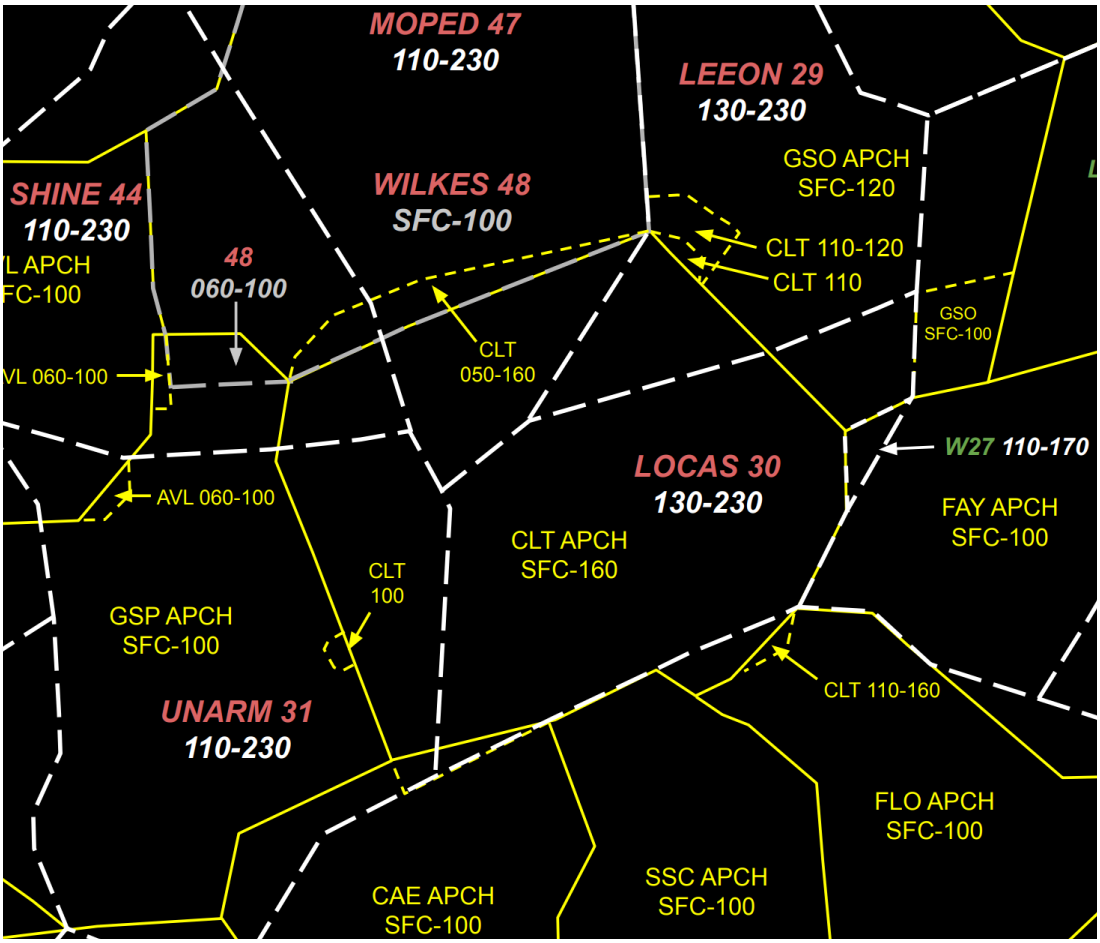
Appendix F. STARS Video Maps

Controllers can access all maps through “CTRL + F2 + [Map Number]”.

1	EXT BND	CLT TRACON External Boundary
2	AR N	Arrival Radar, North Operations
3	AR S	Arrival Radar, South Operations
4	APT/OBS	Airports and Obstructions Map
5	CLT S	Arrival Radar, Departure Radar, Satellite Radar, South Ops
6	CLT N	Arrival Radar, Departure Radar, Satellite Radar, North Ops
7	SAT N	Satellite Radar North
8	SAT S	Satellite Radar South
11	SAT ILS	Satellite ILS/LOC Final Approach Courses
12	SAT OTH	Satellite NDB/VOR Final Approach Courses
13	SAT GPS	Satellite RNAV (GPS) Final Approach Courses
14	RWYS	Charlotte Airport Runways
16	AIRWAYS	Low Altitude Airways
17	CTR SEC	Center Sectors
18	CLASS B	Class B Airspace
19	STARS	Non-RNAV STARS
20	FR N/S	Final Radar, North AND South Simultaneous Approaches
22	NTZ	No-Transgression Zone
24	AIRSPCE	Airspace External Boundaries
25	CLT RNV	CLT RNAV Approaches
30	CHSLYS	CHSLY STAR, South Operations
31	CHSLYN	CHSLY STAR, North Operations
32	S TRANS	DEPARTURE RADAR SOUTH TRANSFER AREA
33	DR S	Departure Radar, South Operations
34	DR N	Departure Radar, North Operations
35	TWR AIR	Local Control Airspace
36	S RNAV	Satellite Radar, South RNAV Approaches
37	N RNAV	Satellite Radar, North RNAV Approaches
40	T ROUTES	T-Routes
47	IR RTES	IFR MILITARY TRAINING ROUTES
48	EOVM	Emergency Obstructions Video Map
49	MVA	Minimum Vectoring Altitude
50	COUNTY	Counties
51	S FAC	South Final Approach Courses
52	N FAC	North Final Approach Courses
55	NAVAIDS	NAVAIDS Within 250 Miles
56	WILKES	ZTL Wilkes Sector
59	STARS N	RNAV STARS North
61	STARS S	RNAV STARS South
64	RNV DEP	RNAV Departure Fixes
66	STADIUM	Stadiums
75	ARR FIX	CLT RNAV STAR FIXES

76	18R18L	CAPTURE POINTS (18R/18L)
78	18C18L	CAPTURE POINTS (18C/18L)
79	18R18C	CAPTURE POINTS (18R/18C)
80	TRIPS S	TRIPS CAPTURE POINTS (SOUTH)
82	36L/36R	CAPTURE POINTS (36L/36R)
83	36C36R	CAPTURE POINTS (36C/36R)
84	36L36C	CAPTURE POINTS (36L/36C)
85	TRIPS N	TRIPS CAPTURE POINTS (NORTH)
89	FILPZN	FILPZ STAR, North Operations
90	FILPZS	FILPZ STAR, South Operations
91	PARQRN	PARQR STAR, North Operations
92	PARQRS	PARQR STAR, South Operations
93	14A GPS	14A GPS
94	AKH	AKH GPS
95	EHO	EHO GPS
96	EQY	EQY GPS
97	HKY	HKY GPS
98	IPJ	IPJ GPS
99	JQF	JQF GPS
101	RUQ	RUQ GPS
102	SVH	SVH GPS
103	UZA	UZA GPS
104	LKR	LKR GPS
105	NOISE S	NOISE 2NM/4NM LINES (SOUTH)
106	35A GPS	35A GPS
107	VUJ	VUJ GPS
108	DCM	DCM GPS
109	EXX	EXX GPS
110	AFP	AFP GPS
111	N52	N52 GPS
112	STOCRN	STOCR STAR, North Operations
113	STOCRS	STOCR STAR, South Operations
114	JONZEN	JONZE STAR, North Operations
115	JONZES	JONZE STAR, South Operations
116	MLLETN	MLLET STAR, North Operations
117	MLLETS	MLLET STAR, South Operations
118	BANKRN	BANKR STAR, North Operations
119	BANKRS	BANKR STAR, South Operations
123	PYG	PYG GPS
150	VR RTES	VFR MILITARY TRAINING ROUTES
201	TOWER S	CLT TOWER SOUTH
202	TOWER N	CLT TOWER NORTH

Appendix G. Interfacility Airspace



Appendix H. Letters of Agreement

a. Atlanta Center (ZTL) Letter of Agreement
b. Greensboro Approach (GSO) Letter of Agreement
c. Jacksonville Center (ZJX) Letter of Agreement
d. Washington Center (ZDC) Letter of Agreement
e. Fayetteville Approach (FAY) Letter of Agreement
f. Greer Approach (GSP) Letter of Agreement

Appendix I. Consolidated Wake Turbulence (CWT) Separation

CLT is authorized to use the recategorized Consolidated Wake Turbulence (CWT) separation standards outlined in FAAO 7110.126B in lieu of the minima in the 7110.65. CWT utilization is recommended, but not mandatory.

The command .recat (identifier) can be used to determine an aircraft's CWT category. The command .recat (category)b(category) will return the appropriate separation for a category behind another category. Example: .recat FbB will return the separation for a category F behind a category B.

I-1. AIRCRAFT WAKE CATEGORIES

Aircraft are categorized as Category A through Category I as defined in the current FAAO 7360.1. This table covers the most commonly seen types.

A Super	B Upper Heavy	C Lower Heavy	D Non-Pairwise Heavy		E B757	F Upper Large		G Lower Large		H Upper Small	I Lower Small
A388	A332	A306	A124	DC85	B752	A318	C130	AT43	E170	ASTR	BE10
	A333	A30B	A339	DC86	B753	A319	C30J	AT72	E45X	B190	BE20
	A343	A310	A342	DC87		A320	CVLT	CL60	E75L	BE40	BE58
	A345	B762	A3ST	E3CF		A321	DC93	CRJ1	E75S	B350	BE99
	A346	B763	A400	E3TF		B712	DC95	CRJ2	F16	C560	C208
	A359	B764	A50	E6		B721	DH8D	CRJ7	F18H	C56X	C210
	B742	C17	AN22	E767		B722	E190	CRJ9	F18S	C680	C25A
	B744	DC10	B1	IL62		B732	GL5T	CRJX	F900	C750	C25B
	B748	K35R	B2	IL76		B733	GLEX	DC91	FA7X	CL30	C402
	B772	MD11	B52	IL86		B734	GLF5	DH8A	GLF2	E120	C441
	B773		B703	IL96		B735	GLF6	DH8B	GLF3	F2TH	C525
	B77L		B741	K35E		B736	MD82	DH8C	GLF4	FA50	C550
	B77W		B743	KE3		B737	MD83	E135	SB20	GALX	P180
	B788		B84D	L101		B738	MD87	E145	SF34	H25B	PAY2
	B789		B74R	MYA4		B739	MD88			LJ31	PA31
	C5		B74S	R135			MD90			LJ35	PC12
	C5M		B78X	T144						LJ45	SR22
			BLCF	T160						LJ55	SW3
			BSCA	TU95						LJ60	
			C135	VMT						SH36	
			C141							SW4	

I-2. WORDS AND PHRASES

a. The word *Super* must be used as part of the identification in all communications with or about Category A aircraft.

b. The word *Heavy* must be used as part of the identification in all communications with or about Category B, C, or D aircraft.

I-3. FULL LENGTH DEPARTURES

NOTE: *Radar minima in miles may be used in lieu of time-based minima for full length departures and intersection departures separated by 500ft or less.*

In Front	Behind	Time
● Same runway or parallels separated by less than 2,500ft ● Parallels separated by 2,500ft or more when projected flight paths will cross		
A	B/C/D/E/F/G/H/I	3 minutes
B/D	B/C/D/E/F/G/H/I	2 minutes
C	E/F/G/H/I	
● Same runway or parallels separated by less than 700ft or any if flight paths will cross		
E	I	2 minutes
● Runway with displaced landing threshold if flight paths will cross when departure follows arrival or arrival follows departure		
A	B/C/D/E/F/G/H/I	3 minutes
B/D	B/C/D/E/F/G/H/I	2 minutes
C	E/F/G/H/I	
E	I	

I-4. INTERSECTION DEPARTURES

In Front	Behind	Time
● Same runway		
H/F/G	I	3 minutes* *May be waived by the pilot.
● Same runway or parallels separated by less than 700ft ● Parallels separated by 700ft or more if flight paths will cross and the thresholds are offset by 500ft or more		
E	I	3 minutes
● Same runway or parallels separated by less than 2,500ft ● Parallels separated by less than 2,500ft with thresholds offset by 500ft or more counts as an intersection departure for this section		
A	B/C/D/E/F/G/H/I	4 minutes
B/D	B/C/D/E/F/G/H/I	3 minutes
C	E/F/G/H/I	

I-5. RADAR SEPARATION MINIMA

Separate aircraft by the minima specified by the table and in accordance with the following:

a. When operating within 2,500ft and less than 1,000ft below the flight path of the leading aircraft over the surface of the earth of a Category A, B, C, or D aircraft.

b. When operating within 2,500ft and less than 500ft below the flight path of the leading aircraft over the surface of the earth of a Category E aircraft.

c. When departing parallel runways separated by less than 2,500ft, the 2,500ft requirement in subparagraph b is not required when a Category I aircraft departs the parallel runway behind a Category E aircraft. Issue a wake turbulence cautionary advisory and instructions that will establish lateral separation in accordance with subpara 2. Do not issue instructions that will allow the Category I aircraft to pass behind the Category E aircraft.

<table>
<tr><th></th><th colspan="9">Follower</th></tr>
<tr><th></th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th><th>H</th><th>I</th></tr>
<tr><td>A</td><td></td><td>5</td><td colspan="2">6</td><td colspan="3">7</td><td colspan="2">8</td></tr>
<tr><td>B</td><td></td><td>3</td><td colspan="2">4</td><td colspan="4">5</td><td rowspan="3">5(6)</td></tr>
<tr><td>C</td><td colspan="4"></td><td colspan="3">3.5</td><td>5</td></tr>
<tr><td>D</td><td></td><td>3</td><td colspan="2">4</td><td colspan="3">5</td><td>5(6)</td></tr>
<tr><td>E</td><td colspan="8"></td><td>4</td></tr>
<tr><td>F</td><td colspan="8"></td><td>(4)</td></tr>
<tr><td>G</td><td colspan="9"></td></tr>
<tr><td>H</td><td colspan="9"></td></tr>
<tr><td>I</td><td colspan="9"></td></tr>
</table>

NOTE: *The leading (in front) aircraft is listed on the left. All values are in nautical miles.*

NOTE: *The values in parentheses are only applicable for two aircraft on approach and such separation must exist by the time the aircraft in front is over the landing threshold.*

Appendix J. Waiver 98-T-60: Successive or Simultaneous Departures Authorization

AFFECTED DIRECTIVE(S): 7110.65, subparagraph 5-8-3b, Successive or Simultaneous Departures.

OPERATION(S) AUTHORIZED: This waiver authorizes CLT ATCT personnel to apply course divergence to successive or simultaneous departures from Runways 18 and 19L no later than 4 miles from the departure end of the parallel runways instead of immediately after departure.

SPECIAL PROVISIONS, CONDITIONS, AND LIMITATIONS:

a. The identity of each aircraft involved must be maintained.

b. There must be notification, prior to departure, to all concerned aircraft that simultaneous departures are departing from the other parallel runway. This information may be provided through the ATIS.

c. At a minimum, initial runway centerline separation must be maintained with no overlapping or touching of primary targets.

d. CLT ATCT personnel must initiate turns not later than 4 miles from the departure of the runway so as to achieve the minimum course divergence (15 degrees).

e. This waiver is issued on the basis that the procedure continues to provide an equivalent level of safety and ensure the safe and efficient control of aircraft.