

ORDER

CHATANOOGA TOWER CHA ATCT

CHA 7110.65C

Effective Date:
May 1, 2011



CHA 7110.65C

STANDARD OPERATING PROCEDURES (SOP)

May 1, 2011

FOREWORD

This Order prescribes standard operating procedures for use by persons providing air traffic control services at Chattanooga (CHA) Airport Traffic Control Tower (ATCT) on the VATSIM network. Controllers are required to be familiar with the provisions of the Order and to exercise their best judgment if they encounter situations that are not covered.

A handwritten signature in black ink, appearing to read 'William Lewis', written in a cursive style.

William Lewis
Air Traffic Manager

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DATE	REVISION	EDITOR/VERSION
<i>14 FEB 2014</i>	<i>Formatting/Procedural</i>	<i>WL/C</i>

CHAPTER 1. GENERAL

Section 1. INTRODUCTION

1-1-1 PURPOSE.

This Order establishes standard operating procedures for use by persons providing air traffic control services at Chattanooga (CHA) Airport Traffic Control Tower (ATCT) on the VATSIM network. This Order is designed to supplement national and regional directives.

1-1-2 AUDIENCE.

This order applies to all vZTL Air Traffic Control Specialist and vZTL Visiting Air Traffic Control Specialist manning Chattanooga (CHA) Airport Traffic Control Tower (ATCT) positions.

1-1-3 DISTRIBUTION.

This Order is available in the vZTL Document Library

1-1-4 CANCELLATION.

This order cancels CHA 7110.65 dated prior to 1 May 2011.

1-1-5 REVISIONS.

Changes to this document are recorded and a copy may request from facility staff.

1-1-6 EFFECTIVE DATE.

This order is effective as of 1 May 2011.

1-1-7 ABBREVIATIONS/ACRONYMS/IDENTIFIERS

As used in this document, the following abbreviations/acronyms/identifiers have the meaning indicated (See APPENDIX A. TERMS, ABBREVIATIONS, ACRONYMS AND IDENTIFIERS TERM.).

Section 2. Equipment

1-2-1 OPERATIONAL POSITIONS AND ASSOCIATED FREQUENCIES.

POSITION	FREQUENCY	CHANNEL
ATCT		
Clearance Delivery (CD)	120.95	CHA-CD
Ground Control (GC)	121.70	CHA-GC
Local Control (LC)	118.30	CHA-LC
TRACON		
Radar East (RE)	125.10	CHA-E
Radar West (RW)	119.20	CHA-W

1-2-2 VOICE SERVERS.

ATL ATCT controllers shall utilize the liveatc.net as the primary voice servers at RW.LIVEATC.NET. VOICE.AIRCHARTS.ORG shall serve as a backup voice server.

1-2-3 INFORMATION DISPLAY SYSTEM.

The CHA IDS shall be operational any time CHA ATCT is staffed. The IDS may be discontinued when only a single controller is staffing CHA ATCT and vZTL is not staffed.

Section 3. GENERAL AIRSPACE

1-3-1 AIRSPACE JURISDICTION.

The CHA ATCT is delegated that airspace from the surface up to and including 10,000' (see FIG 4-1-1 and FIG 4-1-2 for specific CHA airspace delegation).

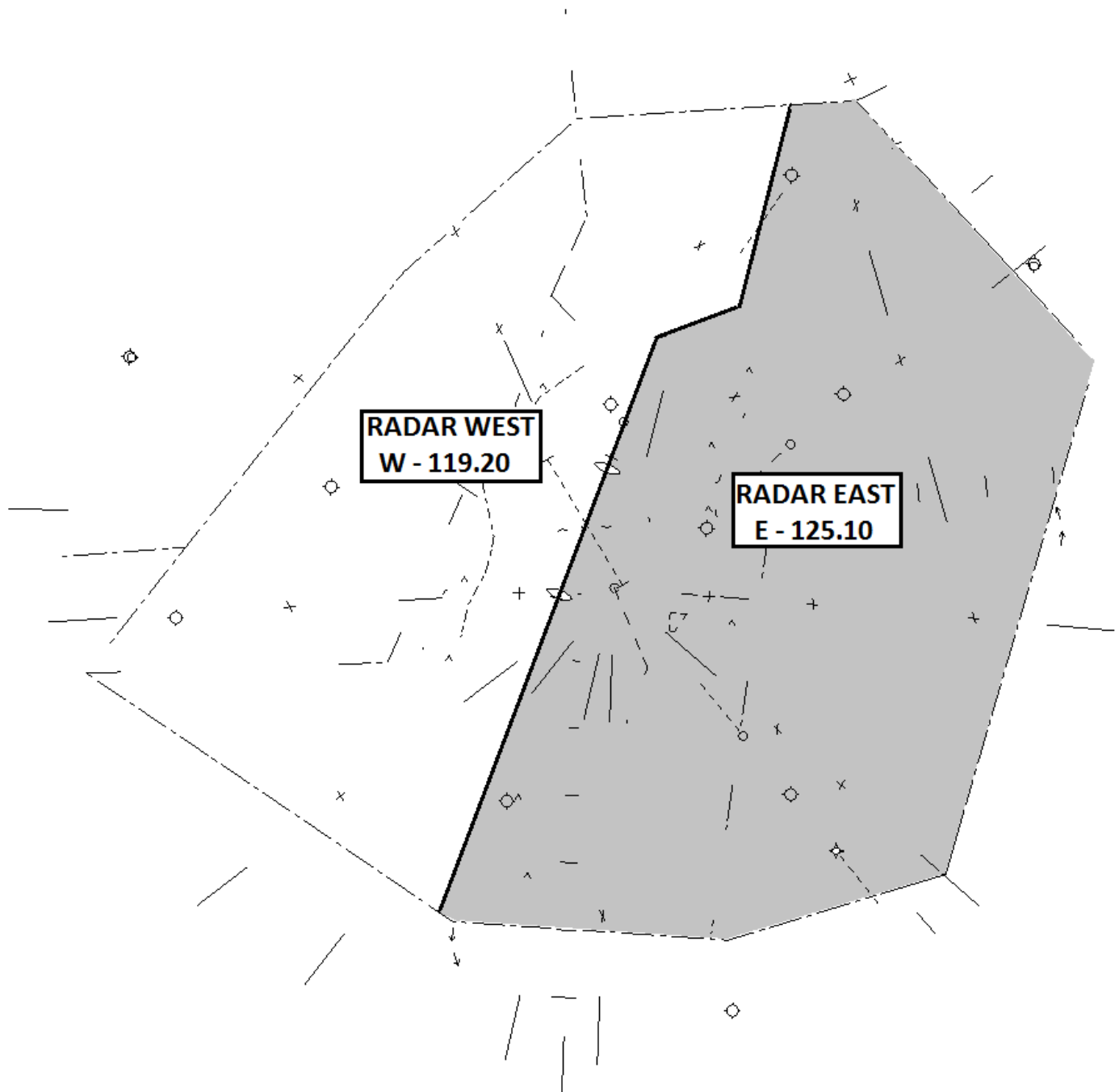
1-3-2 CLASS C AIRSPACE.

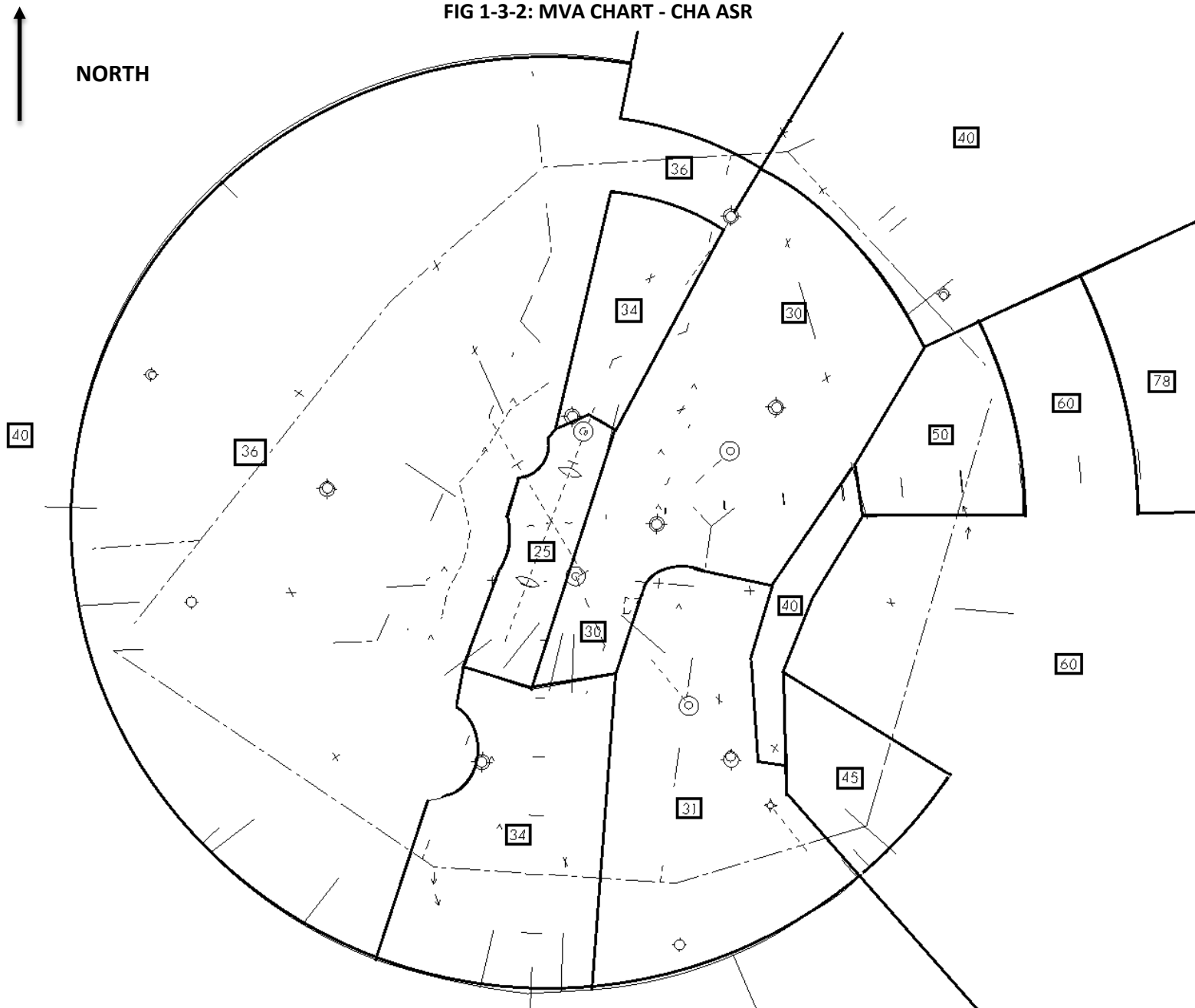
Notify the FLM/CIC of any observed Class C airspace violations. Coordinate with and/or assist all other positions if the aircraft is observed entering the airspace.

1-3-4 MINIMUM VECTORING ALTITUDE CHARTS.

Charts are depicted for operations utilizing the Chattanooga radar systems.

FIG 1-3-1: CHATTANOOGA TRACON AIRSPACE CHART





Section 4. DUTY FAMILIARIZATION AND TRANSFER OF POSITION RESPONSIBILITY

1-4-1 INTRODUCTION.

Essential operational information is contained in the Facility Directives and Announcements Forum. Acknowledge of having read by initialing each item as outlined in the forum.

1-4-2 POSITION RELIEF BRIEFING.

Conduct a position relief briefing and transfer of position responsibility in accordance with FAAO 7110.65 using the appropriate position relief checklist. The relieving controller shall review the information contained on the Tower IDS page prior to accepting a position relief briefing. When assuming responsibility for the position, the relieving controller shall make a statement to the controller being relieved that position responsibility has been assumed.

In addition, the relieved controller must remain plugged in for at least two minutes after being relieved from an operational position to heighten awareness and ensure both controllers have the opportunity to exchange all pertinent information.

Section 5. FLIGHT PROGRESS STRIPS

1-5-1 FLIGHT PROGRESS STRIP.

1	5	8	12	14	15	16
2	6	9		17	18	19
3	7	10	13	20	21	22
4		11				

1-5-2 FLIGHT DATA STRIP MARKING

Flight Data shall be responsible for receiving the initial flight strip for departing aircraft and pass to the appropriate control position.

BLOCK	INFORMATION RECORDED
12	Filed or amended route in accordance with preferred routings, letters of agreement, or coordinated TMU or SWAP routings.
13	Clearance routing type when routing has been amended. ++FRC++ - Full Route Clearance ++FRC XXX++ - Full Route Clearance to a particular routing waypoint. Substitute XXX with the appropriate waypoint. ++EDCT XXXXz++ - EDCT time when issued by ZTL
20	Departure control ARTS position ID
21	"HOLD" when a departure release is required

1-5-3 CLEARANCE DELIVERY STRIP MARKING.

BLOCK	INFORMATION RECORDED
14	Letter of reported ATIS if initial radio communication is established
17	"X" to indicate a correct clearance read back
11	"FF" if a VFR departure is requesting Flight Following

1-5-4 GROUND CONTROL STRIP MARKING.

BLOCK	INFORMATION RECORDED
14	Letter of reported ATIS if initial radio communication is established
19	Runway assignment if other than the normally assigned departure runway.
18	The Taxiway designator for intersection departures.

1-5-5 LOCAL CONTROL STRIP MARKING.

BLOCK	INFORMATION RECORDED
21	Initial departure instructions. H### when a heading is assigned or appropriate departure waypoint.
22	Departure time. Minutes only
16	"*" When a departure release has been obtained for aircraft with a EDCT time in box 13
11	Arrival parking location.
	T Terminal
	TAC TAC Air
	WAC Wilson Air Center
	S South Cargo Ramp
	JA Jones Airway

1-5-6 EXAMPLE FLIGHT PROGRESS STRIP.

DAL6318	2056	KCHA KMSP	HCH. J90. BAE. EAU9 ++EDTC 1950z++	K		
H/B763/Q	350			X	D	20
429 I	350				H200	56

Section 6. GENERAL OPERATING PROCEDURES**1-6-1 TRAFFIC MANAGEMENT.**

Comply with Traffic Management initiatives coordinated with ZTL or CIC. Specific traffic management initiatives will be provided by the FLM/TMC and shall be displayed on the IDS Tower page.

Do not change routes or proposal times for aircraft participating in Traffic Management programs without prior coordination with the CIC/TMU.

1-6-2 RUNWAY USE OPERATIONS.

Chattanooga airports operate on two primary runway use plans defined as North or South operations as defined in the airports runway use plan.

1-6-3 EMERGENCY RUNWAY USEAGE.

Runway 2 / 20 shall be used as the primary arrival runway for emergency aircraft when practical.

CHAPTER 2. CLEARANCE DELIVERY

Section 1. INTRODUCTION

2-1-1 POSITIONS

POSITION	NETWORK CALLSIGN	FREQUENCY
ATIS	KCHA_ATIS	119.85
Flight Data (FD)	CHA_#_DEL	N/A
Clearance Delivery (CD)	CHA_#_DEL	120.95

2-1-2 COMBINING/DECOMBINING POSITIONS.

FD combines to and de-combines from CD. CD combines to and de-combines from GC.

Section 2. FLIGHT DATA

2-2-1 POSITION RESPONSIBILITIES.

Flight Data's Primary responsibility is to reduce the workload of the entire air traffic control tower by performing the following functions.

2-2-2 AIRPORT TERMINAL INFORMATION SYSTEM.

FD shall prepare and maintain the CHA ATIS. The ATIS code shall be verbally passed to all CHA ATCT.

Prior to being transmitted, review the ATIS recording for accuracy. The voice/text should be cross-checked to ensure the message content is the same.

After the ATIS is monitored for accuracy, ensure that the ATIS is broadcasting.

2-2-3 WEATHER BRIEFINGS.

FD shall monitor local weather conditions and prepare a weather briefing to be issued to other controllers prior to assuming a control position. FD shall also pass any hazardous weather information to the CIC and other ATCT control positions.

2-2-4 INFORMATION DISPLAY SYSTEM

FD is responsible for maintaining the IDS system as well as filing PIREP reports received from Local and Radar controllers.

Section 3. CLEARANCE DELIVERY

2-3-1 POSITION RESPONSIBILITIES.

- a. Duties and responsibilities are in accordance with FAAO 7110.65, Tower Terminal Position Responsibilities.
- b. Issue clearances or routing changes to individual aircraft, as required complying with preferred routings, letters of agreement, traffic management initiatives and/or weather avoidance.
- c. Verbally forward flight plan information to aircraft using radio equipment.

2-3-2 FLIGHT STRIP PROCESSING

- a. CD shall initially receive IFR departure flight progress strips.
- b. Review IFR flight progress strips for complete and correct information and amend the aircrafts routing as necessary to ensure the aircrafts routing meets preferred routings, letters of agreement, and coordinated TMU or SWAP routing requirements.
- c. Place the appropriate flight strip markings.

NOTE – Any questionable clearances should be presented to the FLM/CIC or TMC for clarification.

2-3-2 VFR INSTRUCTIONS.

- a. CD shall create a flight progress strip for all aircraft requesting a VFR departure out of the Chattanooga Class C airspace. This flight progress strip must include all known information.
 1. Minimum VFR flight progress strip information
 - i. Callsign or Tail Number.
 - ii. Aircraft Type (Equipment suffix optional).
 - iii. Direction of flight.
 - iv. Beacon code.
 - v. Appropriate strip markings outlined in 1-5-3

- b. Issue the appropriate frequency, and beacon code.

2-3-3 IFR CLEARANCES.

Verbally issue IFR clearances in accordance with the FAAO 7110.65. Assign IFR Aircraft an initial attitude of 5,000 feet or lower filed altitude. Ensure altitudes are at or above published MVAs and MEAs.

2-3-4 EDCT INFORMATION.

Inform aircraft of any departure delays or EDTC information affecting the aircraft.

CHAPTER 3. GROUND CONTROL

Section 1. INTRODUCTION

3-1-1 POSITIONS.

POSITION	NETWORK CALLSIGN	FREQUENCY
Ground Control (GC)	CHA_#_GND	121.700

3-1-2 COMBINING/DECOMBINING POSITIONS.

GC combines to and de-combines from LC

3-1-3 AREA OF JURISDICTION.

GC is responsible for all open movement areas except for active runways.

Section 2. GROUND CONTROL

3-3-1 POSITION RESPONSIBILITIES.

- a. Duties and responsibilities are in accordance with FAAO 7110.65, Terminal Tower Team Position Responsibilities.
- b. Provide service to arriving/departing aircraft and vehicular traffic operating on the movement areas, in accordance with "APPENDIX F. MOVEMENT/NON-MOVEMENT AREAS".

3-1-4 RECEPTION OF ATIS.

Ensure departing aircraft receive the current departure ATIS prior to taxi. Scratch the reported ATIS code in box 14.

3-3-3 DETAILED TAXI INSTRUCTIONS.

Detailed taxi instructions are required for all aircraft/vehicle movement. If the aircraft/vehicle states the route in their request, Ground Control may authorize the movement as requested.

3-3-7 DEPARTURE SEQUENCING

- a. Ground Controllers need to establish a departure queue that assists the LC in maximizing the departure flow and reducing departure delays.
- b. Once a demand is established at the departure runway, develop the departure queue by alternating departure gates/exit fixes. Alternating departure gates/exit fixes may not be necessary if wake turbulence separation will achieve the same result.
- c. Ensure the departure queue meets Traffic Management initiatives.

3-3-8 ARRIVAL TAXI METHODS.

- a. Ensure appropriate runway exits are available to aircraft and there are no ATC restrictions to continued movement beyond the applicable holding position marking. Advise LC if appropriate runway exits are not available.

3-3-12 COORDINATION PROCEDURES.

GC shall coordinate with ZTL TMU or CC when an aircraft requires a release.

CHAPTER 4. LOCAL CONTROL

Section 1. INTRODUCTION

4-1-1 POSITIONS.

POSITION	NETWORK CALLSIGN	FREQUENCY
Local Control	CHA_#_TWR	119.100

4-1-2 COMBINING/DECOMBINING POSITIONS.

LC combines to and de-combines from RE

4-1-3 AREA OF JURISDICTION.

- a. LC is responsible for visual separation:
 1. At the outer marker or five (5) miles from the airport for VFR operations/visual approaches.
 2. At one (1) mile from the runway for aircraft conducting instrument approach procedures, unless otherwise coordinated. LC may, after coordination, assume visual separation responsibilities inside the Outer Marker when weather conditions permit.

Section 2. POSITION OPERATING PROCEDURES

3-3-1 POSITION RESPONSIBILITIES.

Duties and responsibilities are in accordance with FAAO 7110.65, Terminal Tower Team Position Responsibilities.

4-2-1 MANAGING FLIGHT STRIPS.

- a. Departure Flight Progress Strips:
 1. Maintain the order of aircraft cleared for takeoff by retaining the flight progress strip in the sequence received from Ground Control.
 2. Pass the departure strip to the appropriate Radar Controller when the aircraft is cleared for takeoff.
- b. Arrival Flight Progress Strips:
 1. A Flight Progress strip does not need to be obtained for an arrival if the following conditions are met.

- i. The aircraft is only intending on performing a full stop landing.
- ii. The aircraft is has been sequenced on a final approach by Radar.
- iii. Full data block information is displayed on Tower Radar Displays.

- 2. Arrival parking locations shall be verbally passed to GC if received.

4-2-2 MANAGING LOCAL CONTROL TRAFFIC

- a. Runway 02/20 shall normally be used for by all turbojet and 4-engine propeller aircraft
- b. Runway 15/33 shall not normally be used by Heavy aircraft and controllers are cautioned from using 15/33 for large aircraft.

NOTE 1 – LC shall coordinate with the appropriate GC on all helicopter traffic operating in the vicinity of, or flying over, movement areas designated to GC if the helicopter is less than 500 feet AGL.

CHAPTER 5. TRACON

Section 1. INTRODUCTION

5-1-1 POSITIONS.

POSITION	NETWORK CALLSIGN	FREQUENCY
Radar East	CHA_#_APP	125.10
Radar West	CHA_#_APP	119.20

5-1-2 COMBINING/DECOMBINING POSITIONS.

RW combines to and de-combines from RE.

5-1-3 AREA OF JURISDICTION.

The CHA TRACON is delegated that airspace from the surface up to and including 10,000' (see FIG 4-1-1 and FIG 4-1-2 for specific CHA airspace delegation.

Section 2. POSITION OPERATING PROCEDURES

5-2-1 POSITION RESPONSIBILITIES.

Duties and responsibilities are in accordance with FAAO 7110.65, Terminal Radar/Nonradar Team Position Responsibilities.

5-2-2 APPROACHES IN USE.

Determine the appropriate approaches to use at Chattanooga. Disperse this information to the Tower Cab to be utilized in the airport's ATIS.

5-2-3 ARRIVAL SEQUENCING.

Radar East is the primary radar position and establishes the arrival sequence of all CHA arriving traffic.

5-2-4 MARK ANTON AIRPORT.

Either RE or RW may provide radar service to the Mark Anton Airport (2A0), but a point out must be completed for both RE and RW to protect for approach, missed approach, and departures.

- APPENDIX -

APPENDIX A. TERMS, ABBREVIATIONS, ACRONYMS AND IDENTIFIERS TERM.

ACRONYM or IDENTIFIER MEANING			
A80	Atlanta Large TRACON	AAR	Airport Arrival Rate
ADR	Airport Departure Rate	AOA	At Or Above
AOB	At Or Below	APREQ	Approval Request
ARTCC	Air Route Traffic Control Center	ASDE	Airport Surface Detection Equipment
ASR	Airport Surveillance Radar	ATCT	Airport Traffic Control Tower
ATIS	Airport Terminal Information System	ATL	Hartsfield-Jackson Atlanta International
CAT	Category of ILS	CC	Cab Coordinator
CD	Clearance Delivery	CD-1	Clearance Delivery One
CD-2	Clearance Delivery Two	CIC	Controller-In-Charge
DA (DH)	Decision Altitude (Decision Height)	DME	Distance Measuring Equipment
DN	Delta North	EDCT	Expect Departure Clearance Time
ETA	Estimated Time of Arrival	ETD	Estimated Time of Departure
FAAO	Federal Aviation Administration Order	FDB	Full Data Block
FLM	Front Line Manager	FRC	Full Route Clearance
GC	Ground Control	GC-C	Ground Control Center
GC-N	Ground Control North	GC-S	Ground Control South
GDP	Ground Delay Program	GM	Ground Meter
ICAO	International Civil Aviation Organization	IDS	Information Display System
ILS	Instrument Landing System	LA	Low Approach
LA/CA	Low Altitude Alert/Conflict Alert	LAHSO	Land and Hold Short Operations
LAT	Lockheed Air Terminal	LC	Local Control
LC-1	Local Control One	LC-2	Local Control Two
LC-3	Local Control Three	LOA	Letter of Agreement
LUAW	Line Up and Wait	MA	Missed Approach
MIT	Miles In Trail	MM	Middle Marker
MON	Final Radar Monitor (A80)	MVA	Minimum Vectoring Altitude
NAS	National Airspace System	NAVAID	Navigational Aid
NAV/COMM	Navigation/Communications	NC	North Cargo
NOTAM	Notice to Airmen	OJT	On-The-Job Training
OJTI	On The Job Training Instructor	OTS	Out of Service
PDAR	Preferential Departure/Arrival Route	PDC	Pre-Departure Clearance
PDR	Preferential Departure Route	PIREP	Pilot Report
PRM	Precision Runway Monitor (A80)	RACD	Remote ARTS Color Display
RDVS	Rapid Deployment Voice Switch	RVR	Runway Visual Range
RWY	Runway	SAT	Satellite Sector (A80)
SC	South Cargo	SFC	Surface
SIGMET	Significant Meteorological Information	SIA	Status Information Area
SILS	Simultaneous ILS Approaches	SOP	Standard Operating Procedures
STR	Standard Taxi Route	SVA	Simultaneous Visual Approaches
SVFR	Special Visual Flight Rules	TMC	Traffic Management Coordinator
TMU	Traffic Management Unit	TRACON	Terminal Radar Approach Control
UHF	Ultra High Frequency	VA	Visual Approach
VFR	Visual Flight Rules	VR	Visual Approach Radar Separation required
VS	Visual Separation	ZTL	Atlanta Air Route Traffic Control Center

APPENDIX B. ATIS MESSAGE FORMAT

Chattanooga Tower Information _____. _____ ZULU.

Wind _____. Visibility _____. (Sky Conditions). Temperature_____, Dew Point _____, Altimeter _____.

_____ Approach(s) in use, Landing and Departing runway(s) _____

Read back all hold short instructions. VFR Aircraft state direction of flight.

Notice to Airmen _____. Advise on initial contact you have information _____.

Chattanooga Tower Information %id%. %time%. Wind %wind%. Visibility %vis%.
%precip% %clouds%. Temperature %temp%. Dew point %dew% altimeter %altim%
____ Approach in use. %runways%
Read back all hold short instructions. VFR Aircraft state direction of flight.
Advise on initial contact you have %id%.

APPENDIX C-1. POSITION RELIEF CHECKLIST

Flight Data and Clearance Delivery

POSITION RELIEF CHECKLIST

- 1) Status Information Areas:** Applicable IDS and PIREP page, etc.
- 2) Equipment Status:** Radios (proper frequencies (de)selected), Visibility Range and Center, ATIS, RADAR(s), etc.
- 3) Staffing:** Adjacent and inter-facility staffing. A80 Departure Split.
- 4) Airport Conditions/Status:** Airspace configuration, Runway(s) in use, Runway and 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 ATL delays, etc.
- 8) Special Activities:** Events, Evaluations, Emergency, etc.
- 9) Special Instructions:** Coordination, CIC instructions, etc.
- 10) Training in Progress.**
- 11) Traffic information:**
 - a) Aircraft standing by for clearance or TMU release, etc.
 - b) Coordination agreements with other positions.
 - c) Ground Stop or Ground Delay Program information.

NOTE- There must be at least a 4 minute overlap during each position relief briefing as follows: A minimum of 2 minutes prior to receiving the briefing and a minimum of 2 minutes at the end of the briefing. The relieving specialist and the specialist being relieved are responsible for the completeness and accuracy of the position relief briefing.

APPENDIX C-2. GC AND LC POSITION RELIEF CHECKLIST

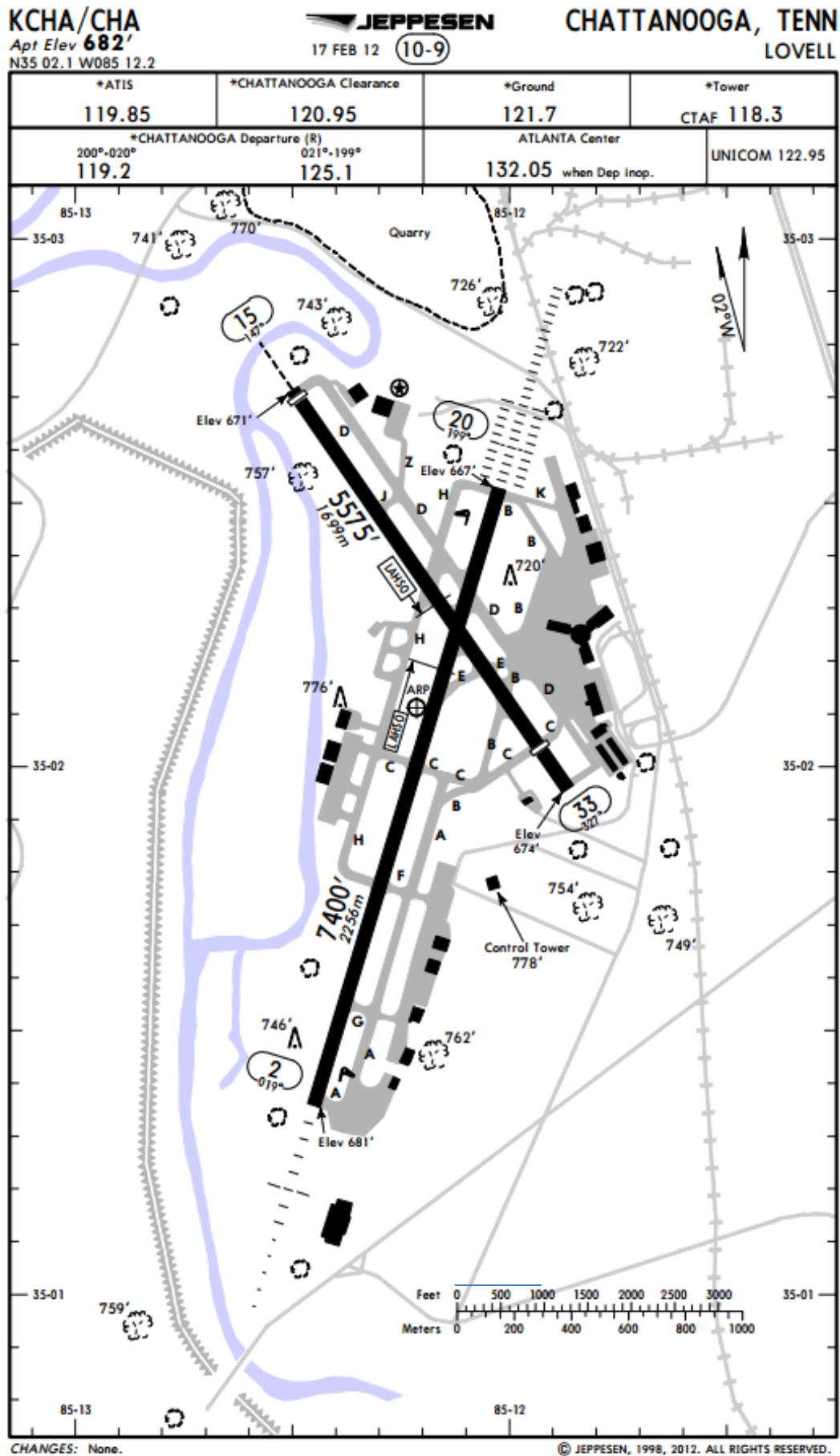
Ground and Local Control

POSITION RELIEF CHECKLIST

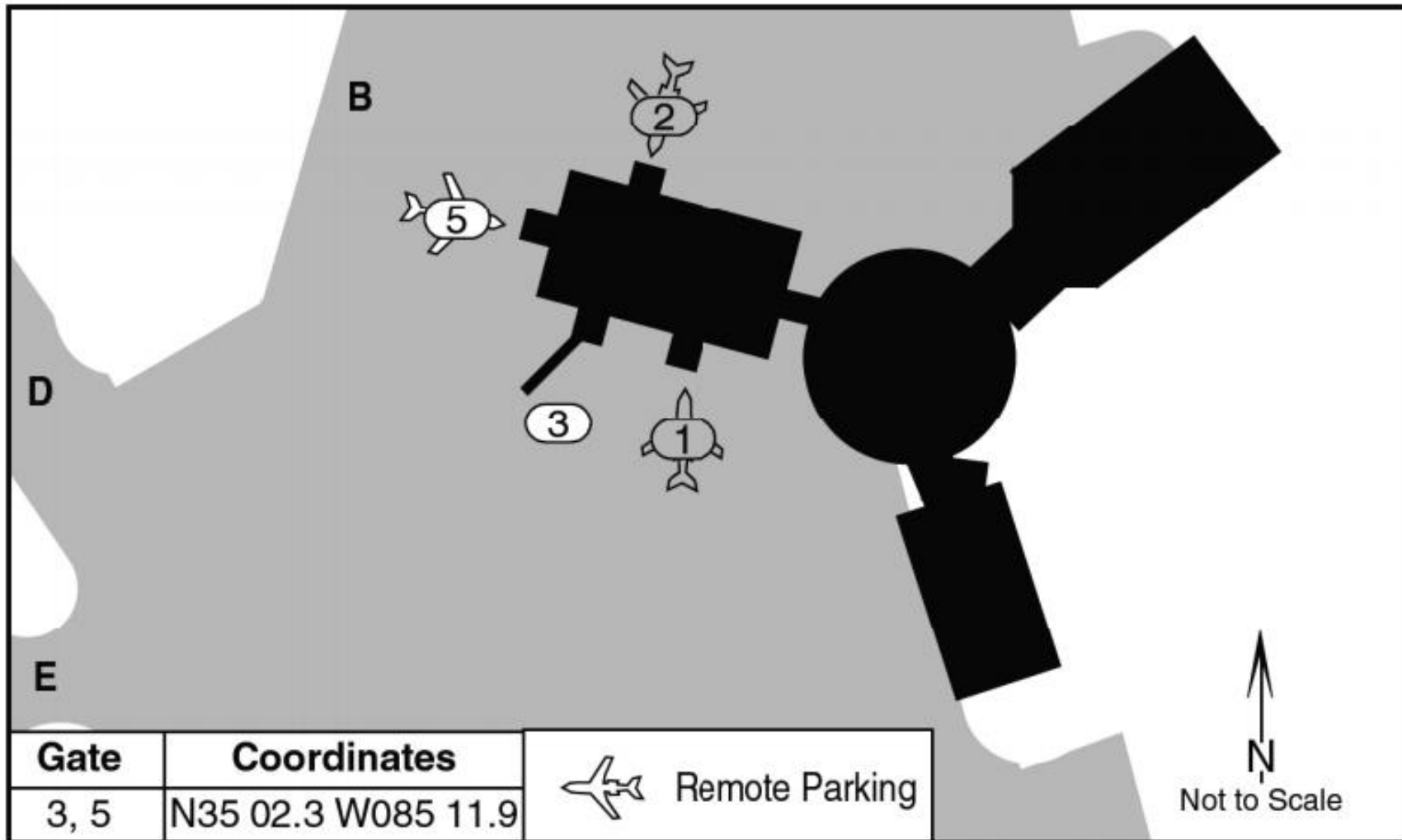
- 1) **Status Information Areas:** Applicable IDS and PIREP page, etc.
- 2) **Equipment Status:** Radios (proper frequencies (de)selected), Visibility Range and Center, ATIS, RADAR(s), etc.
- 3) **Staffing:** Adjacent and inter-facility staffing.
- 4) **Airport Conditions/Status:** Airspace configuration, Runway(s) in use, Runway and taxiway closures, Taxi pattern (Taxi Easy, Correct or Quiet), etc.
- 5) **Airport Activities:** Gate hold procedures, Braking Action reports, etc.
- 6) **Weather:** Trends, Windshear, ATIS, PIREP, SIGMETs, AIRMETs, etc.
- 7) **Flow Control:** Special programs, Reportable ATL 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 and/or vehicle.
 - b) Point-outs.
 - c) Primary targets. Non-radar operations. VFR advisory aircraft.
 - d) Aircraft affected by TMU initiatives.
 - e) Coordination agreements with other positions.
 - f) Aircraft holding or standing by for service.

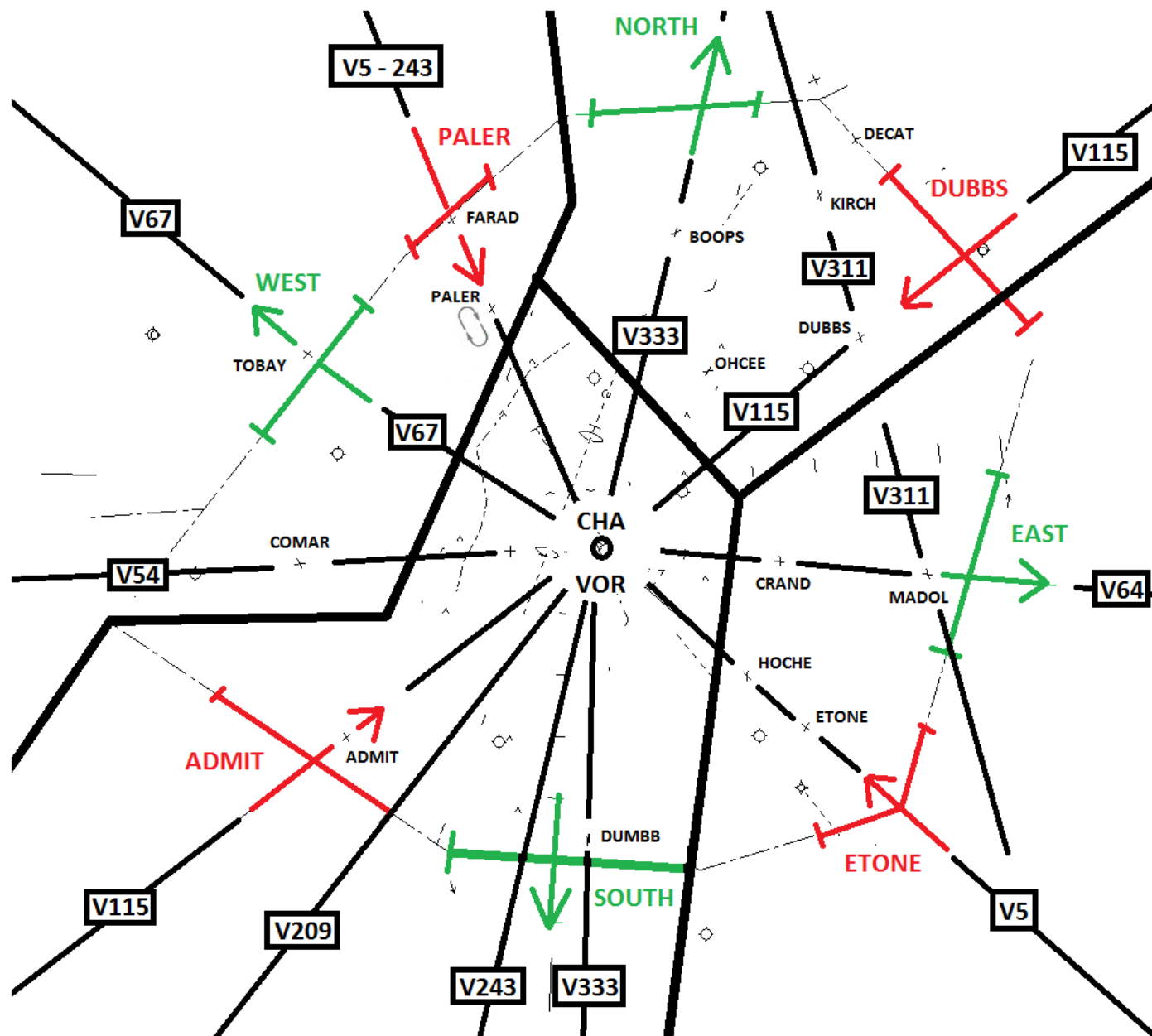
NOTE- There must be at least a 4 minute overlap during each position relief briefing as follows: A minimum of 2 minutes prior to receiving the briefing and a minimum of 2 minutes at the end of the briefing. The relieving specialist and the specialist being relieved are responsible for the completeness and accuracy of the position relief briefing.

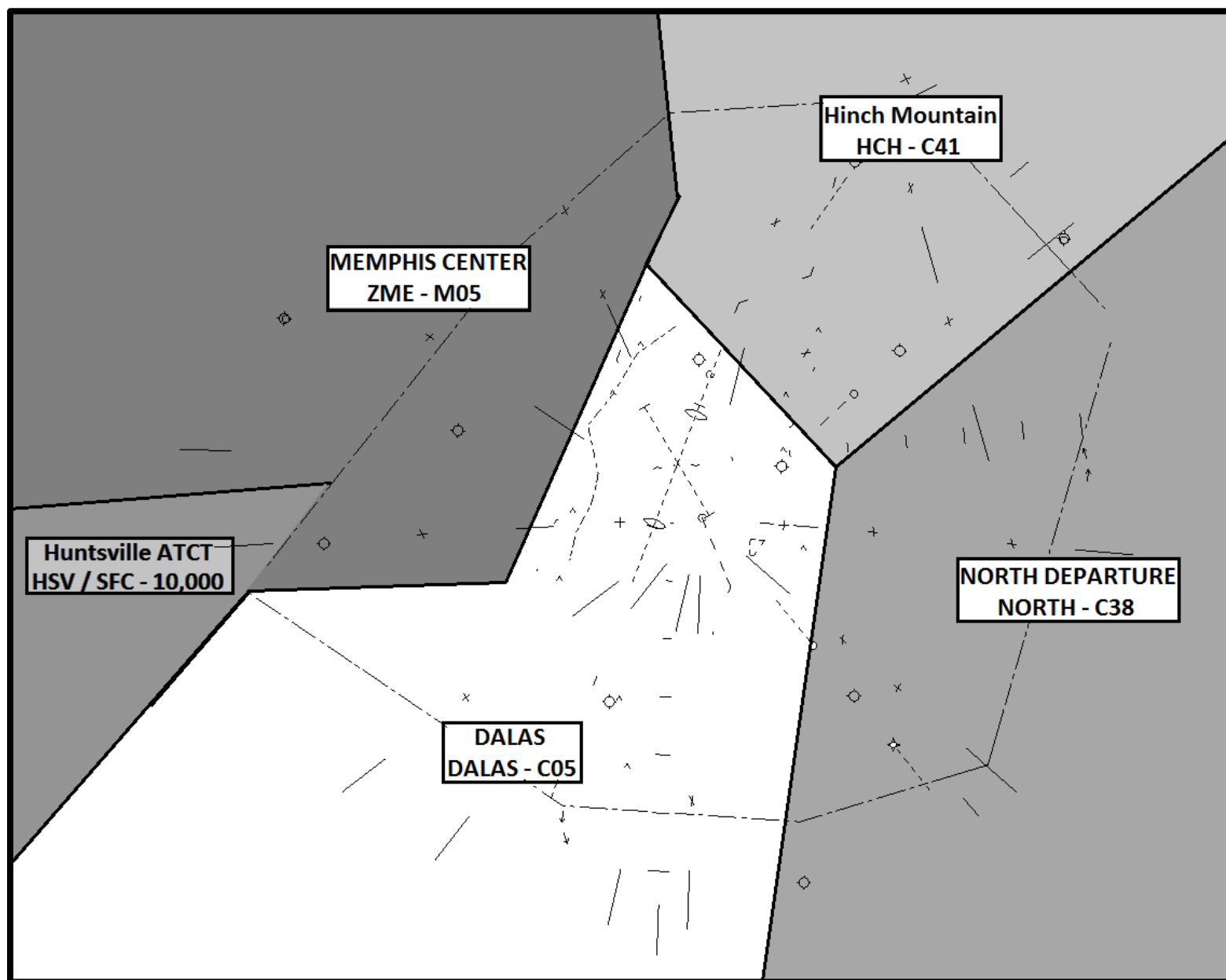
APPENDIX D. AIRPORT DIAGRAM



APPENDIX E. PARKING GATES







APPENDIX H. INTERSECTION DEPARTURE LENGTHS**North Runways**

RUNWAY 2		RUNWAY 33	
A	7400	D	5575
G	6125	C	4900
F	4700	B	4400
C	3300	E	3900
E	2500	RWY 2/22	3400
RWY 33/15	1800	H	2900
D	1450	J	1600
B	0	D	0

South Runways

RUNWAY 20		RUNWAY 15	
B	7400	D	5575
D	5950	J	3975
RWY 33/15	5600	H	2675
E	4900	RWY 2/22	2175
C	4100	E	1675
F	2700	B	1175
G	1275	C	675
A	0	D	0