

ERA24FA217

AIR TRAFFIC CONTROL

Group Chairman's Factual Report - Attachment 5

BNA ATCT Facility Administration

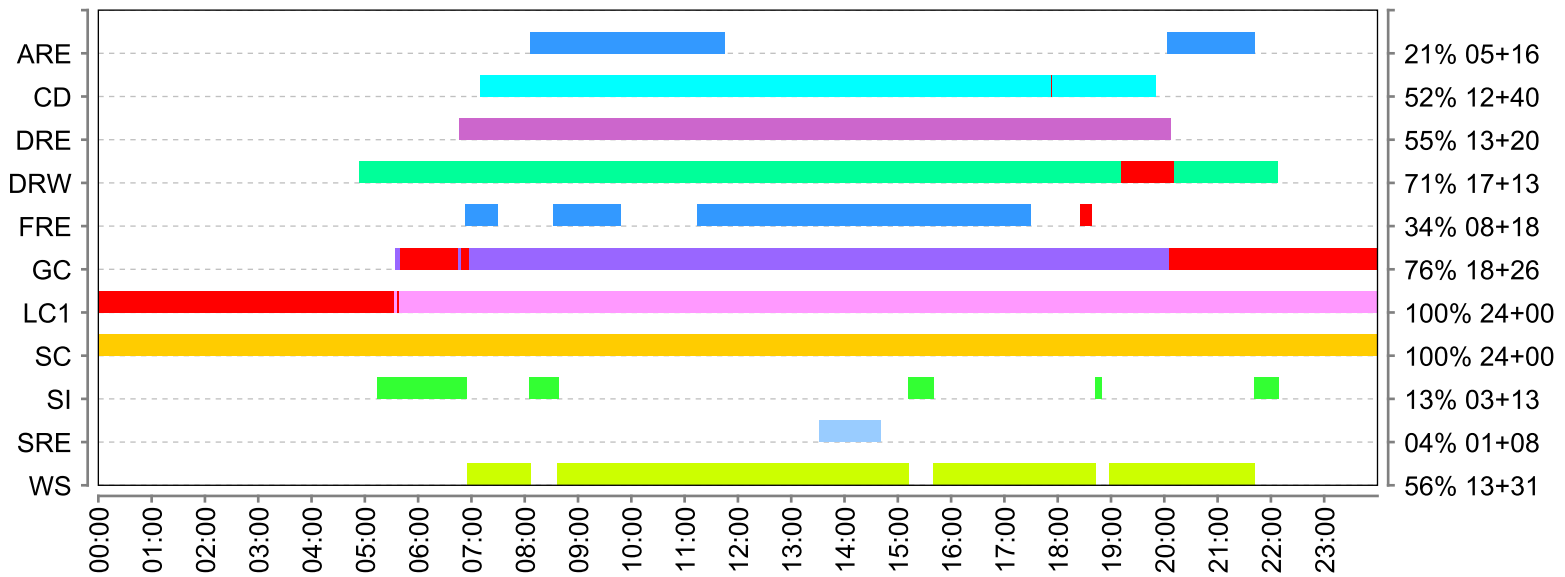
April 16, 2026

Staffed Positions																											
ARE	CD	DRE	DRW	FRE	GC	LC1	SC	SI	SRE	WS																	
Not-Staffed/Closed Positions																											
AD	AD MIN	AR W	CC1	CC2	C11	C12	C1C-A	DD	FD	FM E	FM W	FR W	GC1	GC2	LC2	SD	SR W	TR	TR1	TR2	TR3	TR4	TR5	TR6	TR7	TR8	TR9

OPERATIONS

Date: 05/15/2024 Facility ID: BNA Facility Opens at: 0000 Facility Closes at: 2359

Red bar indicates working position concurrently with a supervisory position.



AIRCRAFT ACCIDENT/INCIDENT PRELIMINARY NOTICE

FROM (Office of origin): BNA ATCT	TO: ESA ROC	DATE (UTC): 05/15/2024	TIME (UTC): 1945
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CODE	(First words of text) AIRCRAFT ACCIDENT/INCIDENT PRELIMINARY NOTICE-Part 1
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A	1. INFORMATION FROM: BNA QC
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B	1. REGISTRATION NO: N47WT	2. MAKE AND MODEL: BE35	3. OPERATOR OF AIRCRAFT:
	4. TYPE OF ACTIVITY (Air taxi, instruction, pleasure, aerial appl., business, executive, sightseeing, etc.) IF KNOWN: Pleasure		
	5. BRIEF DESCRIPTION OF CIRCUMSTANCES SURROUNDING OCCURRENCE: N47WT checked in with BNA DRW at 1652 requesting to climb to 9000'. DRW issued the climb instructions. At 1659z, N47WT was observed at 9500'. DRW instructed N47WT to maintain 9000' and issued the BNA altimeter. Pilot stated they were descending. At 1701z, N47WT appeared to be in a tight right turn and descending below 9000'. At 1702z, radar contact was lost; N47WT was indicating 7800' prior to radar contact was lost.		
	6. WEATHER DATA: BNA 1653z 31009KT 10SM FEW023 BKN036 TCU BKN055 23/16 A2977		
	7. AIRCRAFT DAMAGE: A ☒ DESTROYED B ☐ SUBSTANTIAL C ☐ MINOR D ☐ FIRE E ☐ NONE F ☐ UNKNOWN		

C	OCCUPANTS INDICATE INJURIES: FATAL, SERIOUS, MINOR, NONE		
	1. NAME AND ADDRESS OF PILOT/INJURY: [REDACTED]	2. NAMES OF CREW/INJURIES: 0/0	3. NO. OF PASSENGERS/INJURIES: 2 / 2

D	1. LOCATION OF OCCURRENCE (Nearest city, town, and state) (Give route if overdue or missing): Franklin, TN
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E	1. UTC DATE AND UTC TIME OF OCCURRENCE: 05/15/2024 1702 UTC
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F	1. INFORMATION ON COVERAGE OF OCCURRENCE BY FAA, NTSB, OTHER:
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G	FAA AIR TRAFFIC SERVICES SUMMARY OF FLIGHT HANDLING		
	1A. LAST DEPARTURE POINT: REG	1B. UTC DATE AND UTC TIME: 05/15/2024 1353 UTC	1C. INTENDED DESTINATION: LOU
	2. LAST RADIO CONTACT/POSITION AND/OR RADAR POSITION: Radio contact on DRW at 1700z / Radar contact at 1702z		
	3. LAST ATC CONTROL CLEARANCE: DRW instructed N47WT to maintain 9000' and issued BNA altimeter		
	4. FLIGHT PLAN: A ☒ IFR B ☐ VFR C ☐ NONE D ☐ UNKNOWN		
	5. PILOT BRIEFING: A ☐ YES B ☐ NO C ☐ UNKNOWN		
	6. OTHER:		

RECEIVED AT:	DELIVERED TO:	TIME:
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RECEIVED VIA: A ☐ IN PERSON B ☐ RADIO C ☐ TELEPHONE	RECEIVED BY (Signature and Title):
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NOTE: Part 2 A ☐ ON OTHER SIDE B ☐ ON SEPARATE FORM C ☒ NOT REQUIRED

AIRCRAFT ACCIDENT/INCIDENT PRELIMINARY NOTICE

FROM (<i>Office of origin</i>):	TO:	DATE (<i>UTC</i>):	TIME (<i>UTC</i>):
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CODE	<i>(First words of text)</i> AIRCRAFT ACCIDENT/INCIDENT PRELIMINARY NOTICE-Part 2
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H	1. REGISTRATION NO:	2. MAKE AND MODEL:	3. UTC DATE OF ACCIDENT/INCIDENT:
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I	STATUS OF POTENTIALLY INVOLVED AIRWAY FACILITIES (A.F.) (CHECK [✓] MARK STATUS AS INDICATED BY MONITOR OR REPORTED BY A.F. TECHNICIAN)									
	1. FACILITY TYPE:	2. LOCATION RUNWAY IDENTIFIER:	3. JUST PRIOR TO OCCURRENCE:		4. AT TIME OF OCCURRENCE:		5. FLIGHT INSPECTION:			
			A NORMAL	B ABNORMAL OR OUT OF SERVICE	A NORMAL	B ABNORMAL OR OUT OF SERVICE	CON- DUCTED		SATIS- FACTORY	
							A YES	B NO	C YES	D NO
6. REMARKS (<i>Explain briefly any entry above that is check marked as abnormal, or out of service</i>):										

J	STATUS REPORT RECEIVED FROM PILOTS OR OTHERS				
	List below any facilities reported by pilots or other persons as either operating normally, abnormally, or out of service just prior to, at the time of, or immediately following the time of the accident.				
	1. FACILITY TYPE:	2. LOCATION/ RUNWAY IDENTIFIER:	3. IDENTIFICATION NO. OF AIRCRAFT AND NAME OF PERSON FROM WHOM REPORT WAS RECEIVED:	4. STATUS REPORT (<i>Normal, abnormal, out of service, etc.</i>):	5. TIME OBSERVATION (<i>UTC</i>):
6. REMARKS (<i>Briefly describe the nature of any reported abnormally, reason for being out of service, etc.</i>):					

RECEIVED AT:	DELIVERED TO:	TIME:
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RECEIVED VIA: A ☐ IN PERSON B ☐ RADIO C ☐ TELEPHONE	RECEIVED BY (<i>Signature and Title</i>):
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NOTE: Part 1
A ☐ ON OTHER SIDE B ☐ ON SEPARATE FORM

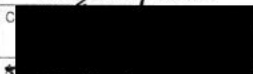
Air Traffic Mandatory Occurrence Report

BNA-M-2024/05/15-0002 - DRAFT

1. Reporting FAC ID			2. Date UTC (dd/mm/yyyy)								3. Time UTC				4. Significant Occurrence?	
B	N	A	1	5	0	5	2	0	2	4	1	7	0	2	☒ Yes ☐ No	
5. MOR reported by (select one): ☐ Controller providing services ☐ FLM ☐ Internal Facility Review ☐ CIC ☐ Aircraft Owner/Operator ☐ Electronically Detected ☐ External Facility Referral ☐ Hotline (Describe in summary) ☐ Other (Describe in summary)														6. Did equipment outage potentially contribute to this event? ☐ Unknown ☐ Yes ☒ No		
Training in progress? ☐ Yes ☒ No ☐ Unknown Nearest Airport: <u>BNA</u> Possible NMAC? ☐ Yes ☒ No Alert #: _____																
Emergency MORs																
H1. MOR type - in-flight emergency conditions involving (select one): ☐ Medical emergency ☐ Inflight equipment malfunction ☐ Pilot Disorientation ☐ VFR in/on top IFR conditions ☐ Fuel quantity ☐ Bird strike ☒ Other (describe in summary)																
H1a. Aircraft information:																
Aircraft ID		Aircraft Type/Suffix		IFR/VFR		Facility communicating with A/C		Position communicating with A/C				Frequency				
N47WT		BE35		☐ IFR ☒ VFR		BNA		DEPARTURE WEST				119.35				
Heading		Altitude		Phase of Flight				Traffic Pattern Location				Evasive Action				
H1b. Malfunctioning equipment component: Only complete for mechanical MORs						H1c. Passenger or crew condition: Only complete for medical MORs						H1d. Medical assistance aboard: ☐ Yes ☐ No ☐ Unknown				
H2. MOR type - in-flight security conditions involving (select one): ☒ Laser light illumination ☐ Hijack ☐ Bomb threat																
H2b. Nearest major city: Only complete for laser light illuminations						H2c. Altitude:		A/C Heading:		Relative Clock Position:						
H2e. Location (lat/long or fix/radial distance);						H2f. Time DEN notified (UTC):		H2d. Route information:								
								Departed REG		Destination LOU		Diverted to				
METAR Observation																
KBNA 151653Z 30009KT 10SM FEW023 BKN036TCU BKN055 23/16 A2977 RMK AO2 SLP074 TCU ALQDS T02280161																

Air Traffic Mandatory Occurrence Report
BNA-M-2024/05/15-0002 - DRAFT

NMAC			
Was this a verified NMAC?			
☐ Yes ☐ No		NMAC Number: _____	
Apt/NAVAID:		Direction:	Distance:
Pilot of N47WT			
Pilot Name:		Phone Number:	Certificate Number:
Address:			
Pilot of			
Pilot Name:		Phone Number:	Certificate Number:
Address:			
NMAC Description:			
Summary			
J1. Summary - provide a brief summary for all MORs in this section that will provide enough information for QA to understand what occurred. Include information about items that require additional information in the specific MOR you are reporting. N47WT, IFR BE35 overflight, requested 9000' when checking in with BNA DRW. DRW issued N47WT instructions to climb to 9000'. At 1659z, N47WT was observed at 9500'; DRW instructed N47WT to maintain 9000' and issued the BNA altimeter. N47WT responded that they were descending; this was the last radio communication received from the aircraft. At 1701z, N47WT appeared to be in a tight right turn and descending below 9000'. At 1702z, radar contact was lost with N47WT indicating 7800'. ACN.			

DAILY RECORD OF FACILITY OPERATION				PAGE NO Page 1 of 1
				DATE May 15, 2024
LOCATION	IDENTIFICATION	TYPE FACILITY	OPERATING POSITION	
Nashville, TN	BNA	ATCT	Watch Desk	 Jim J. Harper
UTC TIME	REMARKS			
0500	P. LINAM ON, SOUTH OPERATION, LAP, WCLC, TRACON CONSOLIDATED TO TWR. CFPL: CIRCULAR WX OTS. 6 LEVEL WX WORKS IN LINEAR MODE. AOCC NTFD. GCO Line is very weak requiring the volume control to be at max adjustment. AOCC notified. HOP shout line OTS. Tech Ops notified and AOCC notified. ASR WEATHER INTERMITTENT. RUNWAY 2L/20R CLOSED. ILS'S OTS. FREQ. 121.7 STDBY TX AND RX OTS. AOCC NOTIFIED. 119.35 MAIN TX OTS. STANDBY WEAK. AOCC NTFD. GC KEYBOARD OTS. AOCC NOTIFIED. HOP SHOUT LINE HAS A LOUD TONE THAT COMES OUT FROM SPEAKERS UNLESS THE LINE IS LISTENED TO AT SOME ETVS. AOCC NOTIFIED. GC STARS KEYBOARD INOPERABLE. AOCC NOTIFICATION INITIALS: SAM -- LM			
0745	Z. HEDRICK ON, ABV NOTED. -- LS			
0932	STARS R10A UPGRADE INITIATED. STARS OFM. -- CC			
0933	STARS R10A UPGRADE COMPLETED. STARS RTS. -- CC			
1013	P. LINAM ON, ABV NOTED. TRACON OPEN. -- LM			
1155	A. FORCUM ON. -- TK			
1200	WCLC. -- TK			
1400	DAILY CONCOURSE D RFI CHECK COMPLETE. NO ISSUES NOTED. -- TK			
1652	NORTH OPS. -- TK			
M 1657	BNA-M-2024/05/15-0001 -- SWA6137 -- TK			
1702	AIRCRAFT ACCIDENT. N47WT. DEN/JSEN NOTIFIED. -- CN			
1745	J. KRAYNIK ON. -- KK			
M 2046	BNA-M-2024/05/15-0002 -- N47WT -- CN			
2100	WCLC. -- KK			
0241	B. POWERS ON. -- BP			
0307	J. LEE ON. ABV NTD. -- UT			
0455	STRAIGHT 31 OPERATION. -- UT			
0459	COB. -- UT			
I CERTIFY that entries above are correct, that all scheduled operations have been accomplished except as noted, and that all abnormal occurrences and conditions have been recorded.		SIGNATURE(S) OF WATCH SUPERVISOR(S) 		

FAA Form 7230-4

**ORDER
BNA
7111.1C**

Standard Operating Procedures



Effective Date: June 22, 2022

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

NASHVILLE ATCT RECORD OF CHANGES

DIRECTIVE NO.

BNA 7111.1C

[illegible]

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

BNA N7111.105

Nashville Air Traffic Control Tower

Effective Date:
November 30, 2023

SUBJ: CHANGE TO SOP

1. Purpose of this Notice. The purpose of this Notice is to make changes to the BNA Standard Operating Procedures, BNA 7111.1C.

2. Audience. This notice applies to all Nashville ATCT personnel.

3. Where Can I Find This Notice. This Notice can be found on the Federal Directives Repository.

4. Background. Change to strip marking procedures. Arrival Radar West procedures added. Tower memory aids added. STARS maps and modifications updated.

5. Procedures. Update the following.

- 4-2 Changed strip marking annotations wording from may be used to must be used. (page 4-1)
 Block 15: Add Record taxi time
 Block 18: Add Record departure time
 Flight strip examples updated
 Removed 8B (page 4-2)
- 4-2-2 Removed figure- replaced with example (4-2)
- 6-1 Record taxi time in block 15 (page 6-1)
- 7-2 Enter departure time in block 18 (page 7-3)
- 10-1-E Added ARW (page 10-1)
- 10-1-F Altitude stacks permitted (page 10-1)
- 10-1-G Final has control for turns, descent to 5000' and speed adjustment (page 10-1)
- 10-2-1-3 ARW procedures (page 10-2)
- 10-3-1-3 ARE procedures (page 10-2)
- 10-3 Notes ARW/ARE procedure Notes (page 10-2)

11-1-A-Note	FRW/FRE Runway assignment requirements and recommendations (page 11-1)
11-1-H	Took out Runway 20R in reduced separation (page 11-1)
11-1-K	Added ARE/ARE (page 11-2)
11-1-P	FRW/FRE control for turns, speed, and descent to 5000' (page 11-2)
11-2-B	FRW Runway assignment and altitude requirements (page 11-3)
11-3-A	FRE Runway assignment and altitude requirements (page 11-3)
Appendix 6-6	Added Runway Status Board for LC 1 and GC
Appendix 9	Added updated TRACON maps for all Runways
Appendix 10-1-2	Added ARW opening and closing checklist
Appendix 10-3-4	Modified map selections, added ARW requirement to HOP, simplified STARS configuration requirements
Appendix 13-1	Modified map selections, simplified STARS configuration requirements
Appendix 14-1	Removed SISO unavailability

Signature on file

Tim J. Harper
Air Traffic Manager (A)
Nashville Air Traffic Control Tower

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

BNA N7111.104

Effective Date:
June 23, 2023

Nashville Air Traffic Control Tower

SUBJ: CHANGE TO SOP

1. Purpose of this Notice. The purpose of this Notice is to make changes to the BNA Standard Operating Procedures, BNA 7111.1B.

2. Audience. This notice applies to all Nashville ATCT personnel.

3. Where Can I Find This Notice. This Notice can be found on the Federal Directives Repository.

4. Background. The SOP is being updated to include the requirement for using AISR as the primary NOTAM system, a new ASR-9 Outage checklist to replace the previous QOJ Only Checklist, and to add a FSL to DSA Checklist.

5. Procedures. Make corrections to all paper and electronic copies of the BNA 7111.1B and upload the Notice to the Federal Directives Repository. Replace the following pages:

TOC	Updated Table of contents to include ASR-9 Outage Checklist and FSL to DSA Checklist
Page 2-2	Added note to Section 2-1-1, A-12, to refer to Section 2-4 for NOTAM handling and responsibilities
Page 2-24	Added Section 2-4, NOTAMS
Appendix 2-11	Replace QOJ Outage Checklist
Appendix 2-12	Add to Appendix 2

signature on file

Tim Harper
Acting Air Traffic Manager
Nashville Air Traffic Control Tower

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

BNA N7111.103

Nashville Air Traffic Control Tower

Effective Date:
March 15, 2023

SUBJ: CHANGE TO SOP

1. Purpose of this Notice. The purpose of this Notice is to make changes to the BNA Standard Operating Procedures, BNA 7111.1C.

2. Audience. This notice applies to all Nashville ATCT personnel.

3. Where Can I Find This Notice. This Notice can be found on the Federal Directives Repository.

4. Background. Adding responsibilities for Radar West & East Associate (AD-DD) positions as well as re-defining Radar and Data Coordinator (CI1 & CI2) positions. Adding in information from previous briefing items including amended 0800/0000L Watch Checklists and reduced runway separation approval for Runways 2L and 20R. Updated hot breaks/run-up/bomb threat parking locations. Added SRE opening and closing checklists to SOP. Added ARE opening and closing checklist to SOP.

5. Procedures. Update the following.

TOC	Update Table of Contents to include Appendix 13 and 14 information.
3-2-1	Add: 2g – 2j. Combining Associate and Coordinator positions (page 3-4/5)
Table 3-1	Add: Radar Associate and Coordinator positions (page 3-6)
9-1-Q & R	Add: Assume the responsibilities of the Coordinator and Associate positions when not staffed. (page 9-3)
10-3-D	Add: ARE opening and closing checklist (page 10-3)
11-1-I	Add: RWY 2R/20L to reduced runway separation (page 11-1)
13-2	Add: Opening and Closing Checklist in Appendix (page 13-1)
14 (all)	Add: West / East Radar Associate Positions (entire chapter)
15 (all)	Add: Radar / Data Coordinator Positions (entire chapter)
Appendix 2-3	Add: verify operation of POT on Saturday 0800 WCL (page A2-4/5)
Appendix 2-5	Add: Enter WCLC on new day's log (page A2-8)

Appendix 3-14	Add: AD-DD PRB (page A3-16/17)
Appendix 3-15	Add: CI1 PRB (page A3-17/18)
Appendix 3-16	Add: CI2 PRB (page A3-18/19)
Appendix 6-5	Replace Hot Brake/Run-Up/Bomb Threat map (page A6-5)
Appendix 10-1 & 2	Add: ARE Opening and Closing Checklist (page A10-1/2)
Appendix 13 (all)	Add: SRE Opening and Closing Checklists (page A13-1/2)
Appendix 14 (all)	Add: AD-DD Opening and Closing Checklists (page A14-1/2)

Signature on file

Marie C. Stewart
Acting Air Traffic Manager
Nashville Air Traffic Control Tower

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

BNA N7111.102

Nashville Air Traffic Control Tower

Effective Date:
October 06, 2022

SUBJ: CHANGE TO SOP

- 1. Purpose of this Notice.** The purpose of this Notice is to make changes to the BNA Standard Operating Procedures, BNA 7111.1C.
- 2. Audience.** This notice applies to all Nashville ATCT personnel.
- 3. Where Can I Find This Notice.** This Notice can be found on the Federal Directives Repository.
- 4. Background.** The SOP is being updated to include procedures for Parachute Jumping (PAJA) and instituting Operational Risk Management (ORM) Procedures outlining the steps Air Traffic will take to collaborate with Tech Ops on any ORM maintenance activities and projects which may affect the National Airspace System (NAS)..
- 5. Procedures.** Update the following.

TOC	Update Table of Contents to include Chapter 24 information.
2-1-2-A-11	Add: Notify SC when JWN PAJA DZ is active. Add and remove JWN PAJA DZ activity to IDS as appropriate. (page 2-6)
3-1-1-A	Add: The briefing system must be checked prior to working the first control position of the shift. (page 3-1)
5-1-13	Add: Add a comment to the ATIS if Runway 31 is being used for departures and the JWN PAJA DZ is active. (page 5-2)
9-1-T	Add: JWN PAJA DZ information and responsibilities IAW current LOAs and directives. (page 9-4)
24	Add: Entire content of Chapter 24 (ORM)

signature on file

Ray E. Cummins
Air Traffic Manager
Nashville Air Traffic Control Tower

FOREWORD

The Standard Operating Procedures contained herein are established on the premise that control personnel are responsible for their actions and accuracy in the performance of their duties. These procedures are supplementary to those contained in the reference publications.

Nashville Air Traffic Control Tower personnel shall be guided by the instructions contained in this Order. All controllers are required to provide air traffic control service in accordance with pertinent references listed in this Order and within designated airspace.

Ray E. Cummins
Air Traffic Manager
Nashville ATC Tower

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CHAPTER 1: GENERAL

- 1. PURPOSE.** This Order prescribes the responsibilities and appropriate jurisdictional boundaries for the Nashville Tower positions of operation.
- 2. AUDIENCE.** This Order applies to all personnel at Nashville ATCT who maintain currency or familiarity.
- 3. WHERE CAN I FIND THIS ORDER?** This Order can be found on the Federal Directives Repository.
- 4. DISTRIBUTION.** This Order is distributed to the Nashville Tower Facility Master File, TRACON, Tower, and the Training Department.
- 5. CANCELLATION.** This Order cancels BNA 7111.1B, dated July 24, 2014.
- 6. EXPLANATION OF CHANGES:** The Order letter sequence has been updated to reflect all previous notices. No change to content has been made since the last Notice dated 2/16/2022.
- 7. EFFECTIVE DATE.** June 22, 2022.

CHAPTER 2: WATCH SUPERVISION

SECTION 1 – Facility, TRACON, and Tower Watch Supervision Responsibilities

2-1-1. WATCH SUPERVISOR (WS)

Watch supervision duties include, but are not limited to, the following:

A. Operational Oversight.

1. Provide general oversight of both Tower and TRACON operations, ensuring the combined facility delivers air traffic services IAW Agency directives.
2. Assume the responsibilities of Tower or TRACON Watch Supervision when combined to the SI or SC position, or both. When either position is split, determine and communicate goals and requirements for Tower and TRACON operations after consultation with SI and/or SC.
3. Monitor the operation and maintain situational awareness including traffic volume/complexity/flows and area/facility resource needs.
4. Resolve operational disagreements or discrepancies between the TRACON and the Tower, taking into account all available information.
5. Monitor air traffic service delivery and (SI/SC) operational oversight and make on-the-spot corrections as necessary.
6. Ensure on-the-job training is accomplished according to current organizational guidance.
7. Assume or delegate (to SC/SI) the responsibilities of facility Traffic Management Unit and ensure completion of traffic count and delay reporting requirements.
8. Provide oversight for Flight Check Operations including required operational briefings and documentation of briefing completion on Form 7230-4.
9. Ensure timely and effective implementation of facility Operational Contingency Plans; act as the POC for communications and coordination during an OCP event.
10. Provide advice on administrative and technical problems related to the operation.
11. Monitor facility operational equipment, assure appropriate notification (AOCC, IT, etc.) of malfunctioning equipment as identified by SI or SC, and give or delegate authority for final approval of operational equipment shutdown.

12. Review and evaluate data sources such as IDS, CEDAR, AIS-R, etc., to ensure accuracy of NOTAMs, GENOTs and other operational information and make appropriate updates when changes occur. Ensure all pertinent NOTAMs that might restrict approach or landing (i.e. FICON values) are appropriately displayed and the appropriate operational position has the information.

NOTE: See Section 2-4 for NOTAM handling, outages, and OM/OS/CIC responsibilities. |

13. Confirm accuracy of WMT Scheduler (or the current Agency Scheduling System) data for the current shift/day and certify Cru-X/ART after each shift.
14. Collaborate with other FAA facilities and civil/military organizations to coordinate work related changes affecting facility operations and inform SI/SC of any actions required or taken.
15. Respond to NAS Security Alerts and ensure appropriate handling of special operations and monitoring of presidential aircraft movement.
16. Complete other documentation, reports and/or functions as needed for operational continuity including any requirements not completed by previous shift WS.

B. Resource Management.

1. Open SI/SC/WS as stand-alone positions to ensure appropriate facility and operational area supervision. The specific, independent functions of the SI, SC and WS positions are essential to safe and efficient air traffic services and should be de-combined from other positions to the extent possible to support full, safe, and efficient air traffic service delivery, maximum situational awareness in each area, and timely assistance to air traffic control specialists.
2. Ensure available resources in both areas are deployed for optimal efficiency, review staffing for current and next shifts and address any issues, process employee work schedule-related requests and actions, taking into account projected operational and non-operational workload including special activities and events. Approve credit hours earned, excused absences, etc., and complete other resource management tasks as needed. Coordinate with SI/SC actions that impact their respective operations. (Note: Only Management can approve Excused Absence.)
3. Overtime assignments: The assignment of overtime may be necessary to ensure the ability of the facility to meet operational requirements (i.e., staffing necessary to provide safe, efficient, and effective air traffic control services with normal position workload and complexity).
 - a) If operational staffing falls below a level necessary to meet operational requirements, the WS must review projected workload and existing/necessary

shift coverage to determine what actions are available and appropriate to supplement resources.

- b) Prior to assigning overtime, the WS should:
 - 1) Reduce the duration and/or delay the provision of breaks away from the operational areas for rest or meal periods.
 - 2) Consider canceling any already approved absences (e.g., annual leave, credit time used, time-off award usage) for employees still at the facility that could provide the needed staffing to meet Operational Requirements. (Note: Employees whose leave has been previously approved for Special Circumstances IAW Article 26 of the NATCA/FAA Contract are generally exempt from the rescission of leave undertaken per this subparagraph.)
- c) If there are not enough operational personnel in the facility to meet projected staffing needs, the WS should assign overtime. The amount of overtime assigned/worked must be the absolute minimum (e.g., 1 hour hold-over or call-in, 2 hours hold-over or call-in, 2 ATCS for 2 hours each hold-over or call-in, etc.) needed to address the projected workload and/or necessary shift or CIC coverage.
 - 1) Consider the required (IAW FAA Order 7210.3, 2-6-7) off-duty periods between shifts: 8-hour break before any shift, 9-hour break between swing and day shift, 12-hour break after a midnight shift, maximum 10-hour operational shift, etc.
 - 2) All overtime assignments must be in accordance with the current NATCA/FAA Contract and current facility MOU.
 - 3) The WS/SI/SC making the overtime assignment must input the overtime assignment into WMT Scheduler (or the current Agency Scheduling System) with the appropriate overtime code (refer to Overtime Causal Factor Wheel in the BNA AT Ops Share Electronic Documents Folder).
- d) If a staffing situation or question cannot be resolved and member of BNA ATCT/TRACON Management is not available, contact the Memphis District (TEME) Deputy General Manager or General Manager for further guidance. Provide relevant information (e.g., projected operational and administrative workload, complexity, gaps in coverage, etc.) regarding resource needs.

C. Administrative Functions.

1. Complete specific WS tasks by shift as described in BNA SOP Chapter 2, Appendix 2-3 for day shift; Appendix 2-4 for evening shift; and Appendix 2-5 for midnight shift.
2. Complete the Watch Checklist (Appendix 2) once each watch, as defined in FAA JO 7210.3, Facility Operation and Administration, 4-6-5g, and make entries in the 7230-4 as required.
3. Ensure appropriate processing and reporting of MORs, incidents and accidents, significant outages and potentially newsworthy/noteworthy events.
4. Ensure appropriate collection, reporting and/or archiving of operational shift data.
5. Process medical information as provided by SI/SC or operational employees. Communicate with RFS staff and coordinate medical status as appropriate. (If CIC, forward info immediately to facility management.) Do not assign administrative duties to medically-restricted personnel unless approved by Air Traffic Manager or designee.
6. Respond to/address any instances of inappropriate behavior provided by SI/SC, then document and upwardly report in a timely manner. (If CIC, forward info immediately to facility management.)
7. Represent the facility during non-administrative hours. Document and upwardly report complaints or other matters presented by customers, stakeholders or members of the public.

2-1-2. TRACON OSIC/CIC (SI)

A. Operational Oversight

1. Position Assignments
 - a) Ensure available resources are deployed appropriately in the TRACON. When resources are simultaneously utilized in both operational areas, the SI must coordinate with the WS to ensure shared awareness of facility configuration and utilization of resources. In situations where resources are limited and a priority of position assignment must be established, the WS must determine how available resources are deployed.
 - b) Monitor current and anticipated air traffic volume and complexity, including weather and other surface or airborne constraints, and assign available personnel in the most optimal manner to support the integrity of the operation. To the extent traffic volume and staffing permits, position assignments should be rotated among the qualified employees to allow them to work operational

positions and support completion of other duties including on-the-job training, briefings, meeting attendance, administrative work and non-operational tasks, etc.

- c) Only work an operational position while assigned SI duties on a limited basis during periods of low air traffic activity. If the SI is engaged in an activity which will interfere with or preclude the performance of operational area supervision duties, delegate the activity or assign another qualified individual to supervise the operational area.
- d) Open TRACON Coordinator positions (CI1/CI2, etc.) when traffic volume and/or complexity warrant additional personnel to supplement operational communication/coordination or perform other duties of those positions.
- e) Coordinate with WS regarding additional resource needs and prior to any assignment of overtime. If immediate action is required (due to end of shift, unplanned absence of personnel, excessive volume/complexity/workload, etc.) and the WS cannot be reached, use good judgment in resolving resource shortages and/or assigning overtime.

2. Training Assignments.

- a) Assign personnel to accomplish on-the-job training (OJT) and related activities according to current facility and/or organizational guidance.
- b) Ensure personnel are provided adequate non-position time to complete required operational briefings and training.

3. Position Relief.

- a) Ensure that breaks are administered in their assigned areas IAW national directives, contractual agreements, and locally developed facility directives/agreements so as to promote the efficiency of the Agency.
- b) Know the whereabouts of employees to ensure their availability for position assignments. SI must notify the WS prior to authorizing personnel to leave the facility.

- 4. Ensure PIREPS are solicited and disseminated as required by FAA JO 7110.65. Disseminate PIREPS by entering into AIS-R or relaying to ZME-FD and entering information into the IDS. PIREPS that are received via FDIO but are applicable to BNA reporting area (within 50nm) must be entered into the IDS. In addition to entering PIREPs in the IDS, notify the SC/SI or WS as necessary and relay to MQY Tower when applicable.

5. Ensure all pertinent significant weather advisories to include but not limited by SIGMETs, AIRMETS, CWAS and all other known or observed weather that may affect aircraft safety are broadcast.
6. Implement Operational Contingency Plans as required.
7. Accommodate Special Operations and conduct monitoring of Presidential Aircraft IAW Agency directives.
8. Configure, monitor, and report equipment status including changes to the WS position. Log all equipment outages on FAA Form 7230-4, Facility Log, and update the IDS. Inform the SC/CIC and all controllers in the TRACON of changes in equipment status/configuration which may adversely affect the presentation or performance of that equipment.
9. Eliminate distractions in the operating quarters by avoiding activities or tasks that may lead to distraction. Examples include: Supervisory administrative tasks that distract from oversight of the operation and can be otherwise accomplished, OJT debriefings, Training Team meetings, other than “pre-duty” briefings, etc. Additionally:
 - a) Breaks should be accomplished outside the operating quarters.
 - b) Tours must not be allowed in the operation if they cause a distraction.
 - c) Non-operational material should be removed from the operating quarters.
10. Make on-the-spot corrections and stop instances of inappropriate behavior, harassment, etc., then report actions/outcomes to WS. (Note: On-the-spot corrections are not considered an evaluation of performance and are required of both OS and CICs.)
11. Notify SC when JWN PAJA DZ is active. Add and remove JWN PAJA DZ activity to the IDS as appropriate.

B. Resource Management.

1. Designate a SI/CIC during periods of absence from the TRACON IAW JO 7210.3, 2-6-2
2. Assign personnel and activate positions as traffic and staffing dictate.
3. The day shift SI, after coordination with WS, will relay to ZME TMU, the runway configuration and Arrival Acceptance Rates, via NTML. If unavailable, relay the configuration and rate via the 119-72 or 77 line no later than 0700L.

4. Complete the traffic count from the night before and start a daily spreader.
5. When the approach control functions are returned to the TRACON with the arrival of the day shift personnel, the TRACON Supervisor/CIC must:
 - a) Transfer control of the ASR-9 and Mode S to the TRACON.
 - b) Advise ZME data to route the FDIO data IAW the new configurations.
 - c) Advise the appropriate ZME sectors of the transfer.
 - d) Enter the appropriate STARS configuration.
 - e) Transfer control of the traffic between the Tower and the TRACON using the Position Relief Checklist.
6. Keep the ZME ARTCC Traffic Management Coordinator advised of the runway configuration and approaches in use at the primary airport.
7. When notified by SC/CIC that deicing procedures are in effect notify ZME ARTCC of the effect on arrival and departure flow rates.
8. When notified by (the tower) SC/CIC or designee that runway(s) XX turn off points are not visible from the Tower and that reduced runway separation is not authorized to runway(s) XX, SI must notify appropriate TRACON positions to discontinue reduced separation on final for runway(s) XX. Notify the WS and enter into the daily log.
9. Ensure the accuracy of the IDS and pertinent NOTAMs are displayed.
10. Refer to and comply with the checklists in Appendix 2 for:
 - a) Runway Changes (Appendix 2-7)
 - b) Runway Closures (Appendix 2-8)
 - c) Runway Openings (Appendix 2-9)
11. Whenever practicable, the SI position will be plugged in with a headset via the ETVS SI position.
12. Inform the SC/CIC of the position configuration in the TRACON and procedures that might affect the operation of the Tower such as:
 - a) Low Activity Procedures

b) Opening/Closing Positions

13. Generate KBNA arrival strips in the TRACON only when:

- a) Multiple positions are operating on FSL only or DSA only mode either for one hour or greater or if by unscheduled outage [or]
- b) Operating on a single RADAR feed.
- c) QOJ (Joelton Long Range RADAR) without ASR-9 for either one hour or greater or if by unscheduled outage [or]
- d) Operation on an ASR-9 single channel without QOJ LRR available either for one (1) hour or greater or if by unscheduled outage.

C. Administrative Functions.

- 1. Complete specific SI tasks by shift as described in BNA SOP Chapter 2, Appendix 2-3 for day shift; Appendix 2-4 for evening shift; and Appendix 2-5 for midnight shift.
- 2. Coordinate leave, shift change and other schedule-related requests with the WS.
- 3. Forward operationally-related medical information to the WS.
- 4. Forward public concerns including noise complaints to the WS.
- 5. Comply with contractual requirements.

2-1-3. TOWER OSIC/CIC (SC)

A. Operational Oversight

1. Position Assignments

- a) Ensure available resources are deployed appropriately in the Tower. When resources are simultaneously utilized in both operational areas, the SI/SC must coordinate with the WS to ensure shared awareness of facility configuration and utilization of resources. In situations where resources are limited and a priority of position assignment must be established, the WS must determine how available resources are deployed.
- b) Monitor current and anticipated air traffic volume and complexity, including weather and other surface or airborne constraints, and assign available

personnel in the most optimal manner to support the integrity of the operation. To the extent traffic volume and staffing permits, position assignments should be rotated among the qualified employees to allow them to work operational positions and support completion of other duties including on-the-job training, briefings, meeting attendance, administrative work and non-operational tasks, etc.

- c) Only work an operational position while assigned SC duties on a limited basis during periods of low air traffic activity. If the SC is engaged in an activity which will interfere with or preclude the performance of operational area supervision duties, delegate the activity or assign another qualified individual to supervise the operational area.
- d) Open Tower Coordinator position (CC2) when traffic volume and/or complexity warrant additional personnel to supplement operational communication/coordination or perform other duties of those positions.
- e) Coordinate with WS regarding additional resource needs and prior to any assignment of overtime. If immediate action is required (due to end of shift, unplanned absence of personnel, excessive volume/complexity or workload, etc.) and the WS cannot be reached, use good judgment in resolving resource shortages and/or assigning overtime.

2. Training Assignments.

- a) Assign personnel to accomplish on-the-job training (OJT) and related activities according to current facility and/or organizational guidance.
- b) Ensure personnel are provided adequate non-position time to complete required operational briefings and training.

3. Position Relief.

- a) Ensure that breaks are administered in their assigned areas IAW national directives, contractual agreements, and locally developed facility directives/agreements so as to promote the efficiency of the Agency.
- 2) Know the whereabouts of employees to ensure their availability for position assignments. SC must notify the WS prior to authorizing personnel to leave the facility.

- 4. Ensure PIREPS are solicited and disseminated as required by FAA JO 7110.65. Disseminate PIREPS by entering into AIS-R or relaying to ZME-FD and entering information into the IDS. PIREPS that are received via FDIO but are applicable to BNA reporting area (within 50nm) must be entered into the

IDS. In addition to entering PIREPs in the IDS, notify the SC/SI or WS as necessary and relay to MQY Tower when applicable.

5. Ensure all pertinent significant weather advisories to include but not limited by SIGMETs, AIRMETS, CWAS and all other known or observed weather that may affect aircraft safety are broadcast.
6. Implement Operational Contingency Plans as required.
7. Accommodate Special Operations and conduct monitoring of Presidential Aircraft IAW agency directives.
8. Configure, monitor, and report equipment status including changes to the WS position. Log all equipment outages on FAA Form 7230-4, Facility Log, and update the IDS. Inform the SI/CIC and all controllers in the Tower of changes in equipment status/configuration which may adversely affect the presentation or performance of that equipment.
9. Eliminate distractions in the operating quarters by avoiding activities or tasks that may lead to distraction. Examples include: Supervisory administrative tasks that distract from oversight of the operation and can be otherwise accomplished, OJT debriefings, Training Team meetings, other than “pre-duty” briefings, etc. Additionally:
 - a) Breaks should be accomplished outside the operating quarters.
 - b) Tours must be removed from the operation if they cause a distraction.
 - c) Non-operational material should be removed from the operating quarters.
10. Make on-the-spot corrections and stop instances of inappropriate behavior, harassment, etc., then report actions/outcomes to WS. (Note: On-the-spot corrections are not considered an evaluation of performance and are required of both OS and CICs.)

B. Resource Management.

1. Designate a SC/CIC during periods of absence from the Tower IAW JO 7210.3, 2-6-2
2. Assign personnel and activate positions as traffic and staffing dictate.
3. Coordinate with the SI/WS regarding runway configuration and Arrival Acceptance Rates.

4. Notify the SI/WS that deicing procedures are in effect and the impact on arrival and departure flow rates.
5. Ensure the accuracy of the IDS and pertinent NOTAMs are displayed.
6. Refer to and comply with the checklists in Appendix 2 for:
 - a) Runway Changes (Appendix 2-7)
 - b) Runway Closures (Appendix 2-8)
 - c) Runway Openings (Appendix 2-9)
7. Whenever practicable, the SC position will be plugged in with a headset via the ETVS SC position.
8. Inform the SI/WS of the position configuration in the Tower and procedures that might affect the operation of the TRACON such as:
 - a) Low Activity Procedures
 - b) Combining of Positions

C. Administrative Functions.

1. Complete specific SC tasks by shift as described in BNA SOP Chapter 2, Appendix 2-3 for day shift; Appendix 2-4 for evening shift; and Appendix 2-5 for midnight shift. Additionally, follow the Tower watch checklist found in Appendix 2-6.
2. Coordinate leave, shift change and other schedule-related requests with the WS.
3. Forward operationally-related medical information to the WS.
4. Forward public concerns including noise complaints to the WS.
5. Comply with contractual requirements.
6. Refer to and comply with the checklists in Appendix 2 for:
 - a) Runway Changes (Appendix 2-7)
 - b) Runway Closures (Appendix 2-8)
 - c) Runway Openings (Appendix 2-9)

7. When LUAW operations are being utilized, SC must assist LC to the maximum extent possible in maintaining awareness of aircraft positions on and near the airport.
8. Inform all Tower personnel of changes in the equipment configuration or status that might affect the presentation or performance of the equipment.
9. Evacuate the Tower when winds reach 65 knots. However, the decision to evacuate can be made at any time the SC feels it is unsafe for employees to remain in the Tower, regardless of whether the winds have reached 65 knots.
10. Be responsible for any changes made to the Airport Lighting Panels.
11. Ensure any information pertaining to any Airfield Alert event or ATC Alert/ATC Limited/ATC Zero event is communicated to the Watch Supervisor in a timely manner.
12. Assist personnel and open/close positions as traffic and staffing dictate.
13. Ensure that visibility observations are taken and forwarded as appropriate.
14. Ensure advisory information on bird activity is issued for fifteen (15) minutes from the last report or until observations or subsequent reports reveal the activity is no longer a factor.
15. Notify the WS/SI of any braking action reports. Enter in the IDS.
16. Ensure PIREPS are requested as required by FAA JO 7110.65. Disseminate PIREPS by entering into AISR or notifying AFSS and entering into the IDS. PIREPS that are received via FDIO but are applicable to our reporting area (within 50nm) should also be entered into IDS. In addition to entering the PIREP in the IDS, notify the SI as necessary. (Relay to MQY Tower when applicable).
17. Ensure all pertinent significant weather advisories (SIGMETS/AIRMETS/ CWA) are broadcast. Ensure all pertinent significant weather advisories to include but not limited by SIGMETS, AIRMETS, CWAS and all other known or observed weather that may affect aircraft safety are broadcast.
18. Notify the WS/SI when deicing procedures are implemented and terminated.
19. Assist the WS/SI in reviewing the IDS information for accuracy, to include pertinent airfield NOTAMs.
20. Review the ATIS voice text message (AVTM) screen for accuracy. For BNA RCCs, monitor the D-ATIS to ensure they have been added to the ATIS.

21. Ensure the ATIS is updated and/or the information is disseminated IAW the FAA JO 7110.65 for events such as Low Level Wind Shear advisories, Unauthorized Laser Illumination events, bird activity, breaking action advisories, RVR values, or Unmanned Aircraft Systems.
22. Inform the SI/WS when Cab Coordinator is opened or closed. When Cab Coordinator is closed, SC will assume the following duties:
 - a) Act as the focal point for coordination between the TRACON and Tower, with the purpose of reducing distractions at the Local Control position and surveilling critical areas of the airport operations.
 - b) Coordinate with the appropriate TRACON position(s):
 - 1) Change(s) in the runway configuration.
 - 2) When additional spacing is required in the approach interval or when the interval can be decreased.
 - 3) Notify SI when runway(s) XX turn off points are not visible from the Tower and that reduced runway separation is not authorized to runway(s) XX. Enter into the IDS.
 - 4) When official visibility changes from IFR to VFR or VFR to IFR.
 - 5) Coordinate with the SI/WS when opposite direction operations are approved.
 - 6) Determine, after conferring with Local Control, when practice approaches to other than the active runway(s) may be made.

NOTE: Practice approaches against the flow of traffic must not be approved.

23. TARMAC Delay Operations:

- a) In response to the “Three / Four-Hour TARMAC Rule”, if a request is made by the pilot-in-command of an aircraft to return to the ramp, gate, or alternate deplaning area, make every attempt to accommodate the request in a timely manner. The pilot’s request should include the reason, such as “tarmac related delay,” and the time by which the aircraft must be airborne or deplane passengers. If unable to accommodate the request due to the request causing a significant disruption of service, inform the pilot of the reason why. A significant disruption of service may include but is not limited to:
 - 1) Accommodating a tarmac delay aircraft would require airborne holding that would result in delays of 15 minutes or more.

- 2) Use of an active runway to taxi a tarmac delay aircraft that would preclude the use of that runway for arrivals or departures and result in arrival/departure delays of 15 minutes or more.
 - 3) Taxi of tarmac delay aircraft would result in placing other aircraft in jeopardy of violating the "Three-hour Tarmac Rule."
 - 4) Taxi of tarmac delay aircraft would displace departure aircraft already in a reportable delay status and result in delays in excess of an additional 15 minutes.
 - 5) The taxi of a tarmac delay aircraft to the ramp, gate, or alternate deplaning area would result in a diversion or the airborne holding of more than three aircraft.
- b) When a tarmac delay taxi request is received, SC, SI or WS must verbally notify the overlying ARTCC TMU. Additionally, when a facility is notified that an aircraft has exceeded the "Three-Hour TARMAC Rule," the Washington Operations Center (WOC) must be notified through the ROC as soon as possible. Notification should include the date and time of the occurrence and the identification of the aircraft involved.
 - c) Requests to taxi for deplanement must be documented on FAA Form 7230-4, indicating the time the request was made.

2-1-4. REPORTING OF SIGNIFICANT OUTAGES and EVENTS

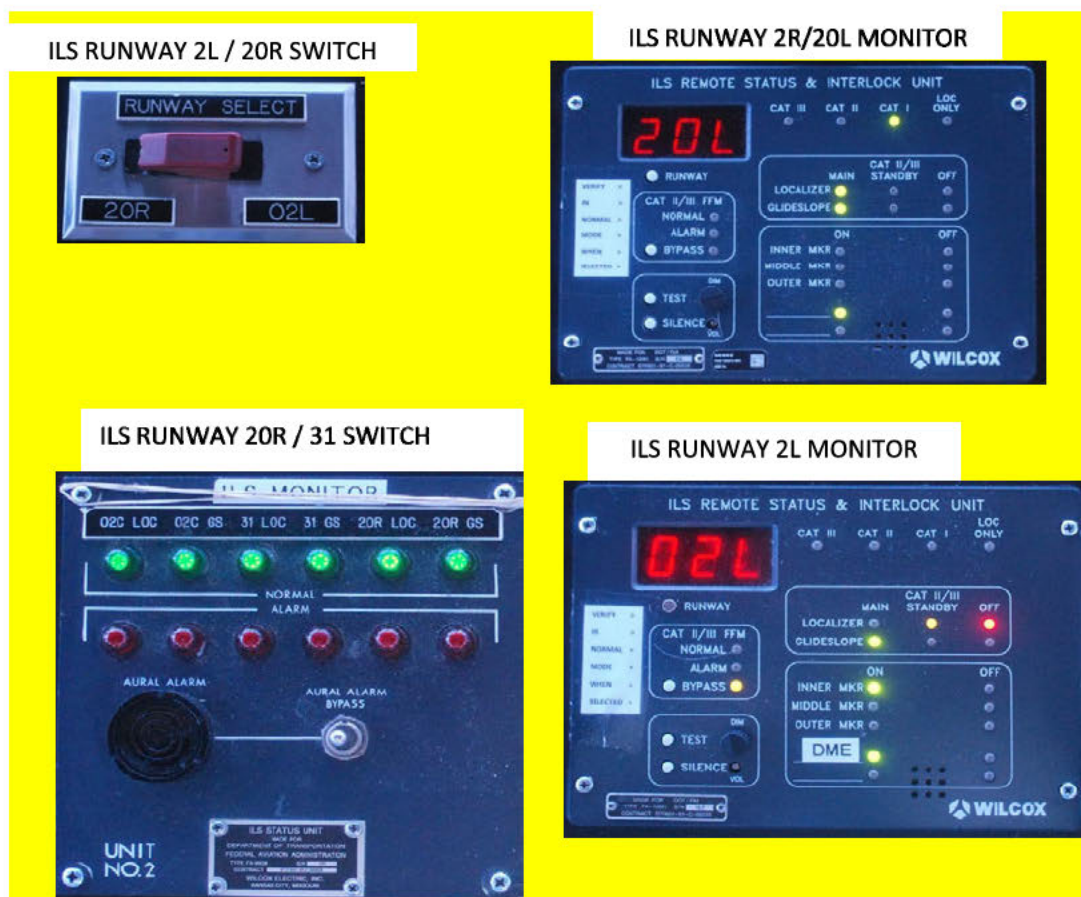
- A. Make a verbal report of all significant outages to the ROC of each occurrence. A follow-up report will need to be made to the ROC if new information has been ascertained after the initial report has been filed.
- B. Outages which should be considered significant are as follows:
 1. **Evacuations of facility** due to fire, smoke, bomb threat, weather, hazardous conditions, etc.
 2. **Total failure of communications** requiring the use of battery powered backup radios.
 3. **Complete power outages** where commercial power fails, requiring us to go to backup generators/batteries.

4. **Unscheduled outage of the radar system** requiring us to go to QOJ or to the contingency plan.
 5. **Unscheduled outage of the automations systems.**
- C. The data contained in these reports is targeted for distribution to the general public. Please keep the information easy to understand and as non-technical as possible.
- D. Use the Significant Outages Report Form (Appendix 2-10) to aid in completing reports to the ROC.
- E. Make appropriate entry in the FAA Form 7230-4 and the IDS if applicable.

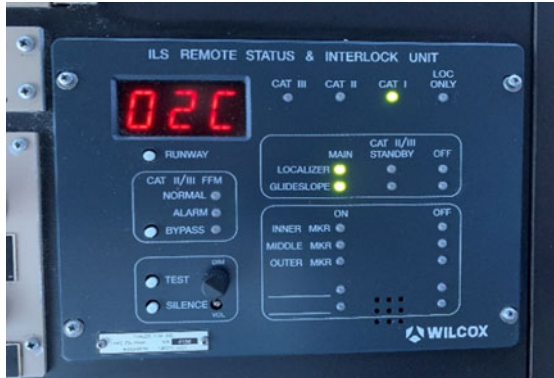
SECTION 2 – NAVAID MONITORING

2-2-1. GENERAL

FIGURE 2-2-1



ILS RUNWAY 02C MONITOR



2-2-2. ILS RUNWAYS 20R AND 31 MONITOR PANEL

- A. This panel is used to monitor the following components of the runway 20R and 31 ILS systems: localizer (LOC) and glide slope (GS). Runway 20R ILS is selected by moving the select switch on the ILS 20R/2L Switch panel to the desired runway position. This brings up the ILS runway 20R and locks out the ILS Runway 2L. Runway 31 systems are on automatically and cannot be turned off or reset from the Tower.
- B. Operation. Runway 20R ILS and the runway 2L ILS are controlled by a toggle switch. This switch is flipped to the desired approach and the localizer will switch over in approximately 20 seconds. If the green "ON" light is not observed within one minute, return to previous position and then toggle again.

NOTE: *ALL G/S's should always indicate green regardless of which runway is selected.*

2-2-3. ILS RUNWAY 2R/20L MONITOR PANEL

- A. This panel is used to monitor the following components of the runway 2R/20L ILS system: LOC (localizer), GS (glide slope), IM (inner marker), OM (outer marker), and DME (distance measuring equipment). Runway 2R ILS is selected by moving the switch on the Master ILS panel to the "2R" position. This brings up RWY 2R ILS and locks out RWY 20L ILS.
- B. Operation. When changing from RWY 20L to RWY 2R: After switching selection to the RWY 2R ILS, the RWY 20L LOC goes to "OFF" and the RWY 2R will indicate a green "MAIN" on the RWY 2R Monitor panel. There will be approximately 20

seconds, hold LOC CYCLE switch until the green "MAIN" is observed. This step must be initiated within 60 seconds of selecting the RWY2R ILS.

- C. When changing from 20L to 2R operations, make sure that the Far Field Monitors do not come up in "Bypass" mode. If "Bypass" mode is selected, push the bypass button until "normal" is illuminated.

NOTE: If any of the above components indicate an ABNL MON (Abnormal Monitor) or ABNL P/E (Abnormal Power/ Environment) go to steps 2-2-6 C and D of this chapter.

2-2-4. ILS RUNWAY 2L MONITOR PANEL

- A. This panel is used to monitor the following components of the Runway 2L ILS system: LOC (localizer), G/S (glide slope), IM (inner marker), OM (outer marker), and DME (distance measuring equipment). Runway 2L ILS is selected by moving the select switch on the ILS Runway 20R/2L switch panel to the "2L" position. This brings up RWY 2L ILS and locks out RWY 20R ILS.
- B. Operation. When changing to ILS Runway 2L from ILS Runway 20R: After switching selector to the ILS Runway 2L, the Runway 20R localizer goes to red "OFF" and the Runway 2L localizer will indicate a green "ON" on the ILS Monitor panel. There will be approximately 20 seconds for the switch back to the ILS Runway 2L. Wait one minute and then re-select the desired ILS Runway 2L.
- C. When changing from 20R to 2L operations, make sure that the Far Field Monitors do not come up in "Bypass" mode. If "Bypass" mode is selected, push the bypass button until "normal" is illuminated.

2-2-5. ILS RUNWAY 2C MONITOR PANEL

- A. This panel is used to monitor the following components of the Runway 2C ILS system: LOC (localizer), G/S (glide slope)
- B. Operation. Runway 2C ILS is always on regardless of flow into BNA. The panel should always be green for both the Localizer and Glideslope.

NOTE: All G/S's should always indicate green regardless of which runway is selected.

2-2-6. INSTRUMENT LANDING SYSTEM REMOTE STATUS AND INTERLOCK UNIT (RSIU) A61, CONTROLS AND INDICATORS.

- A. FAAO 6750.16 specifies that when localizers are established at both ends of a runway to provide guidance for opposite approaches, both localizers shall not be operating simultaneously except for maintenance. FAAH 7030.2 requires that a NOTAM be issued when both localizers are operated simultaneously describing the situation.
- B. A multiple ILS Interlock System is installed in the Tower cab, which will ensure that only one of the localizers serving Runway 2L/20R or Runway 2R/20L will be operating at the same time.
- C. When a change of active runway or approach in use necessitates switching from ILS 2L/R to ILS 20L/R or vice versa, Local Control shall coordinate with the affected positions and change the interlock switch to the appropriate runway ILS.
- D. Tech Ops personnel may operate localizers simultaneously for maintenance purposes under the following conditions:
 - 1. Weather conditions are 1500 feet ceiling and 3 miles or better visibility.
 - 2. The following NOTAM is issued using the attached table when localizers on opposite ends of the runway/s are operated simultaneously:

"ILS RUNWAY ____ UNUSABLE FROM (DME FIX) (as appropriate) ____ ____ INBOUND".
 - 3. Clearance Delivery will include the NOTAM on the ATIS.
- E. When the ILS RSIU CAT III or CAT II indicator is lit, that category of operation can be entered or continued. When the CAT III or CAT II indicator is flashing, that category of operation can be continued but not entered. In conjunction with the ILS RSIU category indications, the air traffic controller is directed to FAAO 6750.24 for determination of allowable category of operation of the Mark 20 ILS.

2-2-7. NAVAID MALFUNCTION / ALARM

- A. The TOWER OSIC/CIC must take the following action when an alarm signal or report indicates an Air Traffic (AT) system component has failed.
 - 1. Try to restore the NAVAID to normal operation. (See FIG "2-2-1")
 - a. Runway 20R, 2C, 31, 20R ILS Monitor Panel
 - 1) If RWY 20R LOC goes into alarm, change selector switch to the opposite ILS. Wait one minute and then re-select the RWY 20R ILS.

- 2) If the RWY 2C or RWY 31 LOC goes into alarm, wait one minute to allow the component to reset itself.
- b. Runway 2R/20L ILS – Press the “Runway” button immediately below the Runway display window to cycle to the opposite direction system. Wait one minute, then press the “Runway” button again to cycle back.
- c. Runway 2L ILS Monitor Panel – If RWY 2L LOC goes into alarm, change selector switch to the opposite ILS. Wait one minute and then re-select the RWY 20R ILS.
- d. Glide slopes: If any GS fails, wait one minute while the component attempts to reset itself.

NOTE –

When selecting the Runway 2R/20L ILS, ensure the CAT II/III FFM cycles to “Normal” mode. If the FFM remains in “Bypass”, press the “Bypass” button until the green “Normal” light illuminates.

NOTE –

The Runway 2C and Runway 31 ILS systems are controlled automatically and cannot be selected remotely from the tower.

NOTE –

All Glideslope systems will remain in operation regardless of Runway selected.

2. If it is suspected that the alarm is a result of control line or monitor failure rather than an actual NAVAID malfunction, take appropriate action as indicated in FAA JO 7110.65, NAVAID Malfunctions.
3. If unable to restore the NAVAID, discontinue its use and notify the WS/SI.

B. The WS/SI will:

1. Notify affected sectors and facilities.
2. Notify AOCC. AOCC will issue any necessary NOTAMs and notify Tech Ops as appropriate.
3. Notify ZME TMU if operations will be adversely impacted.
4. Make an entry in the FAA Form 7230-4, and update the IDs if applicable.

Control or Indicator Function

Control or Indicator**Function**

CAT III Indicator

Lights green to indicate that Category III ILS operation is allowed. Indicator flashes to indicate Category III ILS is not allowed.

CAT II Indicator

Lights green to indicate that Category II ILS operation is allowed. Indicator flashes to indicate entering Category II ILS is not allowed.

CAT I Indicator

Lights green to indicate CAT I ILS operation is allowed.

LOC ONLY Indicator

Lights yellow to indicate ILS localizer only is the only operation allowed.

RUNWAY Indicators

Display runway identifier: programmable at Remote Control System Unit (RCSU (or equivalent equipment) associated with ILS at each end of runway and transmitted to ILS RSIU from selected runway RCSU.

Left Segment

Displays a numeral 0 through 3 or the symbol "-"

Center Segment

Displays a numeral 1 through 9 or uppercase letter E.

Right Segment

Displays a blank or uppercase letter R, L, C, or the symbol "-".

CAT II/III Localizer
MAIN Indicator

Lights green when selected runway's RCSU localizer communication/display assembly MAIN indicator is lit. Indicator flashes if localizer executive monitor is bypassed and/or remote control is disabled or if localizer main equipment is stepped on but is interlocked off or waiting to begin radiating after a failure.

CAT II/III Localizer

Lights yellow when selected runway's RCSU localizer

STANDBY Indicator

Communication/display assembly STANDBY indicator is lit. Indicator flashes if localizer executive monitor is bypassed and/or remote control is disabled or if localizer standby equipment is in alarm.

CAT II/III Localizer OFF Indicator	Lights red when selected runway's RCSU localizer communication/display assembly OFF indicator is lit.
CAT II/III Glide slope MAIN Indicator	Lights green when selected runway's RCSU glide slope communication/display assembly MAIN indicator is lit. Indicator flashes if glide slope executive monitor is bypassed and/or remote control is disabled or if glide slope main equipment is stepped on but interlocked off or waiting to begin radiating after a failure.
CAT II/III Glide slope STANDBY Indicator	Lights yellow when selected runway's RCSU glide slope communication/display assembly STANDBY indicator is lit. Indicator flashes if glide slope executive monitor is bypassed and/or remote control is disabled or if glide slope standby equipment is in alarm.
CAT II/III Glide slope OFF Indicator	Lights red when selected runway's RCSU glide- slope communication/display assembly OFF indicator is lit.
CAT II/III FFM NORMAL Indicator	Lights green to indicate far field monitor (FFM) kit equipment intolerance signal is active and not bypassed.
CAT II/III FFM ALARM Indicator	Lights red to indicate FFM kit equipment out-of- tolerance signal is active and not bypassed.
CAT II/III FFM BYPASS Indicator	Lights yellow when selected runway's RCSU localizer communication/display assembly FIELD BYPASS indicator is lit.
INNER MKR ON Indicator	Lights green when selected runway's RCSU inner marker communication/display assembly ON indicator is lit. Indicator flashes if inner marker beacon monitor is bypassed and/or remote control is disabled or if equipment is stepped on but is interlocked off or waiting to begin radiating after a failure.
INNER MKR OFF Indicator	Lights red when selected runway's RCSU inner indicator marker communication/display assembly OFF indicator is lit.

OUTER MKR ON Indicator	Lights green when selected runway's RCSU outer marker communication/display assembly ON indicator is lit. Indicator flashes if outer marker beacon monitor is bypassed and/or remote control is disabled or if equipment is stepped on but is interlocked off or waiting to begin radiating after a failure.
OUTER MKR OFF Indicator	Lights red when selected runway's RCSU outer marker communication/display assembly OFF indicator is lit.
DME ON Indicator	Lights green to indicate auxiliary equipment 1 is on and functioning normally.
DME OFF Indicator	Lights red to indicate auxiliary equipment 1 is off or in alarm.
AURAL ALARM	Sounds upon receipt of subsystem status change, including FFM kit equipment status, from selected runway's RCSU. Sounds when the RUNWAY switch is activated. Sounds when there is a RCSU/ILS/ RSIU communication fault
DIM Control	Adjusts intensity of ILS RSIU RUNWAY indicators, yellow CAT II/III FFM BYPASS indicator, and all green indicators.
CAT II/III FFM BYPASS	If remote control is enabled at localizer subsystem site, disables (bypass) FFM kit equipment.
TEST momentary pushbutton switch	Press to test all ILS RSIU indicators (aural and switch visual).
SILENCE momentary pushbutton switch	Press to silence aural alarm or to cancel RUNWAY switch interlock change request.

2-2-8. RADAR

A. Radar channel changes. The following steps are in the exact order; do not change the sequence.

1. Select "HIGH VOLTAGE OFF" for the operating channel.

2. Select the standby channel "ON LINE".

3. Wait approximately three seconds.
4. Select the "HIGH VOLTAGE ON" for the on-line channel

NOTE: Do not stop the antenna rotation with the high voltage on. This may cause the radar transmitter to malfunction, resulting in possible equipment damage.

- B. Safeguarding the ASR-9 antenna. Steady winds or gusts to 80 knots or more shall be reason to stop antenna rotation. The decision to stop the ASR-9 antenna rotation should be made jointly between Air Traffic and Tech Ops personnel. The OS/CIC shall make the decision to stop antenna rotation when Tech Ops personnel are not available.
- C. Operating the ASR-9 Engine generator. The ASR-9 generator switches over automatically.

SECTION 3 – Bird Hazards

2-3-1. BACKGROUND

- A. Due to the serious threat of bird strikes to aircraft by increased bird activity on or around the airport, it is essential that prompt notification of this activity be reported.
- B. A bird hazard is considered to exist whenever the birds frequenting an area on or in the vicinity of an airport are in sufficient numbers (considering types, size, location and habits) to be potentially hazardous to aircraft operations.

2-3-2. PROCEDURES

- A. Always have the Bird Activity Warning on the ATIS.
- B. When a bird strike is reported on a runway, that runway is considered to be unusable. No further operations may be conducted to that runway unless an emergency exists or a critical phase of flight is involved.

Note: Only MNAA can close a runway; however, after a bird strike, the Tower will consider it unavailable for ATC purposes.

- C. MNAA must be notified immediately about any bird strike on or around the airport. Upon receipt of a bird strike report, MNAA will normally close the affected runway

until a runway inspection can be accomplished. Upon completion of the inspection, MNAA will reopen the runway.

- D. When a pilot reports a bird strike, the OS/CIC will enter a Mandatory Occurrence Report (MOR) in CEDAR on the Facility Log, 7230-4. This information may be entered into the National Wildlife Strike database.

SECTION 4 – NOTAMs

2-4-1. NOTAM Handling

Aeronautical Information System Replacement (AISR) is the primary method for NOTAM retrieval. AISR has been configured to monitor NOTAMs for the airports within BNA Airspace. After receipt and review of pertinent information, applicable NOTAMs must be managed in accordance with Chapter 2, Watch Supervision, of this document.

2-4-2 Notification of United States NOTAM System (USNS) Outage

Memphis Air Route Traffic Control Center (ZME) must inform BNA when the USNS experiences an outage. The notification will include informing BNA to use the Candidate NOTAM System webpage <https://notambackup.faa.gov>. USNS return to service notification will be handled by ZME.

2-4-3 OM/OS/CIC Responsibilities

When notified by the overlying ARTCC, Terminal facilities must open the Candidate NOTAM System webpage and make it readily accessible to operational personnel so that NOTAMs can be quickly retrieved when the facility is notified of a new or cancelled NOTAM.

CHAPTER 3: DUTY FAMILIARIZATION

SECTION 1 -- Duty Familiarization

3-1-1. GENERAL

- A. Essential operational information is contained in briefings posted in the current agency briefing system. Employees must view and acknowledge completion of these briefings on/prior to due date according to current procedures and practices. If the item requires a “verbal” briefing, the employee should contact the WS/SI/SC to receive the briefing or guidance regarding how to receive it. When a “pre-duty” briefing is published, WS/SI/SC will ensure employees on duty receive the briefing as soon as operationally practicable.

Note: Employees who are absent from the facility for more than 30 days must receive a verbal briefing of relevant information from the training department and/or a manager or designee.

- B. In accordance with FAA JO 7210.3, Facility Operation and Administration, 2-2-4, all operational personnel must review and listen to the currently available recorded CWSU briefing prior to working their first control position of the shift.
1. Operational personnel must advise the WS/SI/SC or indicate on the daily tracking sheet when complete.
 2. If the Recorded CWSU briefing is not functioning correctly or available to review, the employee must obtain current regional weather information from the WS/SI/SC and/or through the position relief briefing process.
- C. When a new recorded CWSU briefing is posted, operational personnel must review and listen to the recorded CWSU briefing prior to working their next control position.
1. WS or their designee must review the status of the recorded CWSU briefing at 0545L, 1200L and 2045L, and as needed until a new scheduled recorded CWSU briefing is posted, then notify all operational personnel of the updated briefing availability and ensure work assignments allow review of the briefing as described in B. above.
 2. Operational personnel who will not work a control position prior to the end of their current shift are exempt from the above requirements.

3-1-2. SIGN ON/OFF PROCEDURES (CRU-ART)

- A. Facility sign on/off procedures must be administered in accordance with FAA JO 7210.3 and Cru-Art procedures.

B. Electronic logs (Duty Board “drag and drop”) in Cru-ART will be used to indicate responsibility at all operational positions in the Tower and TRACON.

C. The following procedures apply to all personnel working operational shifts:

1. Employees may elect to sign themselves onto or off of Cru-ART at the beginning and/or end of their assigned shift.
2. Employees who do not begin their assigned shift at the assigned start time must be responsible for signing onto Cru-ART when they begin their shift.
3. Employees who do not end their shift at the assigned stop time must be responsible for signing off of Cru-ART when they end their shift.
4. With the exception of 1, 2, and 3 above, the WS will be responsible for signing in or out all employees at the beginning and at the end of each shift.
5. The sign in must be accomplished by the start of the actual shift.
6. The sign out must be accomplished within 15 minutes of the shift end time.
7. Employees who take leave of any kind during their assigned shift must be responsible for signing onto or off of Cru-ART during the appropriate time during their shift.
8. The WS/SI/SC will be responsible for performing the “drag and drop” function when employees are relieving or being relieved from positions of operation. The employee may elect to do so during the position relief briefing.
9. Only the WS/SI/SC will be authorized to “drag and drop” an employee into the “Other Duty List”.
10. In lieu of the previous procedures, employees may populate the Cru-ART position log by use of the STARS SISO program.

D. Leave.

1. Employees must notify the WS of the type of leave requested.
2. Beginning of shift (BOS) leave will be entered as a regular work schedule.
3. The employee will enter the BOS leave when they sign in.
4. Middle of Shift (MOS) leave will be entered as End of Shift (EOS) and the employee will be responsible for returning their name to the “Available List”. This will record the end of the MOS.

- E. The WS must certify employee attendance for the period of their watch. If sign in/sign out does not occur, a visual alert will be activated in the software that the WS must reconcile as appropriate for the situation.

3-1-3. TRANSFER OF POSITION RESPONSIBILITIES

- A. All positions of operation require duty familiarization and transfer of position responsibility IAW FAA JO 7110.65, FAA JO 7210.3 and BNA 7111.1.
- B. Facility and position relief briefing checklists will be maintained on the clipboard and IDS provided at each position.
- C. A self-brief, using the self-brief checklist, must be accomplished prior to assuming any position. Exceptions to this requirement are WS, SI, and SC, which require full verbal briefing of all position relief briefing (PRB) checklist items. (See [Appendix 3-1](#)).
- D. The PRB will include a position preview by the relieving controller(s) and a position review by the controller(s) being relieved. The time required to effectively preview and review the position will vary according to workload, traffic volume and traffic complexity.
- E. When the relieved employee is ready to begin the position relief briefing, he/she must verbally ensure on a recorded line that the relieving employee has completed the self-brief before communicating the items on the PRB checklist for the appropriate position.
- F. During the PRB, items in **RED** must be verbally stated. Items in **BLACK** need only be mentioned if applicable, e.g., an item's status has changed since the briefing began or a recent change has not been updated in the SIA and/or other prescribed sources of information used for the self-brief, etc.
- G. When the relieved employee has completed all steps of the position review process (IAW FAA JO 7110.65 Appendix A 6.d. 3-6), he/she must verbally speak operating initials on a recorded line. If speaking the initials will cause a distraction at the position being relieved, this step can be accomplished at an alternate position as follows: LC – SC, GC – LC2, TRACON POSITIONS – AD
- H. In order to have the Developmental/CPC-IT give the position relief briefing when OJT is being conducted:
 - 1. Both the CPC being relieved and the relieving CPC will plug in to the operating position being relieved.
 - 2. The Developmental/CPC-IT being relieved, and the relieving Developmental/CPC-IT if appropriate, will plug in at another position, call the position being relieved, and conduct the position relief briefing.

3. The relieved CPC will then move to the other position station for the overlap and the incoming Developmental/CPC-IT will plug in to the position with their OJTI.

SECTION 2 – Combining/De-combining Positions of Operation

3-2-1. PROCEDURES

- A. During the day and evening watches, all positions will be combined/de-combined as traffic conditions dictate.
- B. The following procedures are to ensure a standardized and orderly method of combining/de-combining positions of operation within the facility.
- C. The WS/SI/SC may authorize configurations other than those listed.

1. Combining Tower Positions

- a) Close Cab Coordinator Two (CC2).
- b) Local Control Two (LC2) to Local Control One (LC1).
- c) Ground Control to Local Control One (LC1).
- d) Clearance Delivery (CD) to Ground Control.

2. Combining TRACON Positions

- a) Arrival Radar West (ARW) to Arrival Radar East (ARE).
- b) Arrival Radar East (ARE) to Departure Radar West/East (DRW/DRE).
- c) Final Radar West (FRW) to Final Radar East (FRE).
- d) Final Radar East (FRE) to Arrival Radar East (ARE).
- e) Satellite Radar East (SRE) to Departure Radar East (DRE).
- f) Departure Radar East (DRE) to Departure Radar West (DRW).
- g) East Radar Associate (DD) to Departure Radar East (DRE).
- h) West Radar Associate (AD) to Departure Radar West (DRW).

i) Close TRACON Radar Coordinator (CI1).

j) Close TRACON Data Coordinator (CI2).

D. When combining/de-combining positions, it will be the responsibility for the controller transferring responsibility to another position to:

1. Enter the appropriate data into the STARS keyboard regarding the position configuration.
2. Advise SI/SC when position combining/de-combining has been completed.
3. DRE must select 127.17 when ARE is combined with DRE.
4. DRE must select 128.75 when SRE is combined with DRE
5. DRW must select 120.6 when ARW is combined with DRW.
6. Call ZME Flight Data (119 line, dial 94) and have the FDIO printer configuration updated.

SECTION 3 -- Facility Positions / Frequencies

See Table 3-1 on next page.

Table 3-1

POSITION	ID	STARS	VSBP	ECS	VHF	UHF	BACK-UP	MONITOR
CLEARANCE DELIVERY/ FLIGHT DATA								
Clearance Delivery	CD		X		126.05	348.6		121.5, 243.0
Flight Data	FD							
ATIS					135.1			
GROUND CONTROL	GC	L	X	X	121.9	348.6	132.95	121.5, 243.0
LOCAL CONTROL								
Local 1	LC1	T	X	X	118.6	257.8		121.5, 243.0
Local 2	LC2	Q		X	132.35	348.6		
CAB COORDINATOR	CC2							
DEPARTURE CONTROL								
West	DRW	X	X		119.35	372.0		***124.55, 121.5, 243.0
East	DRE	Y	X		118.4	360.7		121.5, 243.0
RADAR ASSOCIATE								
West	AD	G						***124.55, 121.5, 243.0
East	DD	J						***121.7, 121.5, 243.0
ARRIVAL CONTROL								
West	ARW	W	X	X	120.6	372.0		121.5, 243.0
East	ARE	E	X		127.175	360.7		121.5, 243.0
FINAL CONTROL								
West	FRW	B	X	X	133.0			
East	FRE	F	X		124.75			
SATELLITE CONTROL								
East	SRE	S	X	X	128.75			*** 121.7
RADAR COORDINATOR DATA COORDINATOR	CI-1 CI-2			X				

VSBP = Orange Voice Bypass Jack

ESC = PET 2000

*****Monitor 121.7 when MQY is closed**

*****Monitor 124.55 when JWN is closed**

Only one position per operation is required to monitor emergency frequencies.

CHAPTER 4: TOWER

4-1. GENERAL

A. Frequencies.

Use **Table 4-1** to determine required frequencies to be selected or monitored.

Table 4-1	
Frequency Selection	
Select radio frequencies:	Monitor frequency:
CD/FD – 126.05/348.6	121.5/ 243.0
GC – 121.9/348.6	121.5/ 243.0
LC1 - 118.6/257.8	121.5/ 243.0
LC2 – 132.35/348.6	121.5/ 243.0
Table 4-1 NOTE: Only one position is required to monitor emergency frequencies.	
Table 4-1 NOTE: Frequency 348.6 is shared with CD and GC; therefore, it is not monitored by LC1 when LC2 is combined to LC1.	

4-2. TOWER FLIGHT PROGRESS STRIP MARKING

FIGURE 4-2-1 (FAA FORM 7230-8)

1	5	8	9	9B	10	11	12
2 2A	6	8A			13	14	15
3							
4	7	8B	9A	9C	16	17	18

The following strip marking annotations must be used in addition to those specified in FAA JO 7110.65: (See Figure 4-2-1)

Block	Information Recorded
8	“NC” to indicate “Needs Clearance”

8A	- 1X or 1Y (indicating needs new departure freq, check mark indicates freq issued)
9	- Highlight a cross out departure by underlining the departure procedure
9A	- Highlight the FRC requirement by boxing or circling the "O FRC" - ✓ after "O FRC" indicating full route clearance issued
9B	- Indicate aircraft parking location (if known) with an "@" symbol and AL (Atlantic), SG (Signature), GR (Guard Ramp), 42 (HGR 42), etc. - STOP (indicating ground stop, line through to indicate ground stop cancelled (Optional)
9C	- Adjacent to Block 13, write the TMU number to indicate call for release required
10	ATIS Code
12	✓ (Check Mark) indicating clearance issued
13	- Clearance release time/Clearance void time
14	- EDCT time
15	- Record taxi time
16	- Runway assignment (must be written as both numeric and alpha- i.e. 2C, 20R
17	- Indicate an intersection departure by writing an "X" and the taxiway
18	- Record departure time

EXAMPLES –

AAY459 F/A320/L 677	BNAT 	5663 P1655 360	KBNA KDSM KBNA	KBNA HGGRD3 TINGS J45 STL TWAIN COLIE SKBOZ JAVAS DSM KDSM O FRC ✓	A EDCT 1830	✓ 21 28
DAL2207 F/B739/L 872	BNAT 	1003 P1635 250	KBNA KATL	KBNA TIPPN3 BRXTN CHPPR CHPPR1 KATL STOP	J 24/28 2C	✓ 18 25
N434EP C172		0326 VFR 030	JWN	W	20C x 56	

4-3. ATIS

A. ATIS INFORMATION

(Fill in the appropriate information in areas which are underlined. Information in **BLUE** is to be used as an example only).

NASHVILLE AIRPORT INFORMATION **BRAVO 1953** ZULU WEATHER

WIND **320 AT 25 GUST 35**
VISIBILITY **4**
SKY CONDITIONS **FEW 40, OVC 120**
TEMP **25**
DEW POINT **18**
ALTIMETER **2996**

ALL AIRCRAFT MUST READBACK ALL RUNWAY HOLDING INSTRUCTIONS AND ALTITUDE ASSIGNMENTS INCLUDING AIRCRAFT IDENTIFICATION.

ILS and RNAV / or **VISUAL** APPROACH(es) RUNWAY(s) **2L, 2C, 2R and 31** IN USE

NOTE: If utilizing runways that allow simultaneous visual approaches (aircraft may be side by side) ensure “Simultaneous Visual Approaches” are advertised.

AIRCRAFT DEPARTING RUNWAY(s) **2L, 2C, 2R and 13**

(when applicable) JETS ARRIVING RUNWAY(s) **31** FOR NOISE

(when applicable) JETS DEPARTING RUNWAY(s) **31** FOR NOISE

(when applicable) NOTICE TO AIRMEN **TAXIWAY JULIET CLOSED BETWEEN TAXIWAY HOTEL AND TAXIWAY TANGO SIX, GLIDE PATH RUNWAY 2L OUT OF SERVICE**

(when applicable) BREAKING ACTION ADVISORIES ARE IN EFFECT

(when applicable) LOW LEVEL WIND SHEAR ADVISORIES ARE IN EFFECT

WARNING, BIRD ACTIVITY IN THE VICINITY OF THE AIRPORT USE EXTREME CAUTION.

ADVISE YOU HAVE INFORMATION **BRAVO**

NOTE: Prior to being transmitted the ATIS message shall be reviewed/monitored to ensure completeness, accuracy and clarity. This should be accomplished by the SC/CC2 if possible.

B. MANUAL ATIS RECORDING

Figure 4-3-1 MANUAL ATIS CONTROL PANEL



4-3-2 MANUAL ATIS CONTROL PANEL (CONT)



1. In the event of a failure of the TDLVS automated ATIS the Transmitter Input Control Switch (TICS), located just below the manual ATIS at CD must be set to ATIS RCDR to

disable the automated ATIS. Once disabled the ATIS may be recorded using the manual ATIS recorder.

2. When the D-ATIS is inoperable, formulate a manual ATIS using the template outlined in Chapter 5-3. A.
3. Recording a manual ATIS. (Refer to figures 5-3-1, 5-3-2)
 - a. To record.
 1. Handset must be plugged in.
 2. Select the recorder by using the recorder selector switch on bottom left.
 3. On the selected recorder (1 or 2), move the Record/Monitor switch to RECORD
 4. Record message using handset.
 5. Monitor message by moving the Record/Monitor switch to MONITOR
 - b. To transmit, move the Record/Monitor switch on the selected recorder to ON LINE

CHAPTER 5: CLEARANCE DELIVERY (CD) / FLIGHT DATA (FD)

5-1. CLEARANCE DELIVERY

A. Clearance Delivery will:

1. Issue via CPDLC, PDC or verbally, clearance to all IFR aircraft departing BNA. If an IFR clearance is to be issued by a position other than CD, coordinate the issuance and deliver the flight progress strip to that position.

NOTE - All IFR aircraft departing BNA will be issued an appropriate SID. When an aircraft requests no SID, verify the pilot can comply with the Takeoff Minimums and Obstacle Departure Procedures (Located in front of Approach Plates) and clear the aircraft via radar vectors to first fix.

2. All departing aircraft that will be worked by the TRACON must be entered into the NAS via FDIO or STARS. This will generate a bar-coded flight progress strip. Handwritten strips are okay for aircraft that Local Control will keep. If using the STARS "VFR Flight Following" method, the following must apply:

Enter callsign, destination airport, type, altitude, and control position receiving the flight plan

EXAMPLE: N12345 BHM C172 055 1Y (enter)

Eight fixes are available for VFR aircraft that wish to receive radar services from the TRACON but not beyond the BNA airspace boundary.

NE3	1Y or 1S in a N, S, and 31 config
EE3	1Y or 1S in a N, S, and 31 config
SE3	1Y or 1S in a N, S, and 31 config
SS3	1Y or 1S in a N, S, 1X in 31 config
SW3	1X in a N, S, and 31 config
WW3	1X in a N, S, and 31 config
NW3	1X in a N, S, and 31 config
NN3	1X in a N, S, 1Y in 31 config

Enter callsign, a fix mentioned above, type, altitude, and control position receiving the flight plan-
N12345 EE3 C172 055 1Y enter

Write the requested heading on the strip.

When using one of the fixes above, do not enter an altitude above 145. This will cause the FP to process to ZME.

Helicopters that already have pre-assigned beacon codes will just need a hand-written strip.

3. Strips will be stuffed into the strip holders.
4. Assign Departure Control frequencies as appropriate:
 - a. Departure West (X) 119.35 / 372.0
 - b. Departure East (Y) 118.4 / 360.7
 - c. Satellite Radar East (S) 128.75
 - d. Tower (LC-1) 118.6 / 257.8, (LC-2) 132.35 / 348.6
 - e. Final Radar East (F) 124.75, (FRW) 133.0
5. Issue via PDC, CPDLC or verbally all ADRs (between the pluses) with the following exception: If the ADR contains only “BNA” and the departure gate name in between the pluses, the entire ADR will be omitted.
6. Deliver ALL flight progress strips to the GC position.
7. Ensure that aircraft are informed when “Gate Hold” procedures are in effect (reference FAA JO 7110.65).
8. For operational purposes, (i.e. when delivering information directly to the pilot), wind information must be taken directly from the TDWR Centerfield Wind Indicator and the altimeter setting must be taken from the Altimeter Setting Indicator (DASI).
9. Inform the SC of any changes to the weather or special request that will impact the lighting panel settings.
10. Inform the SC of any information pertaining to an “OPS FOD” or “ARFF ALERT” event.
11. When combining the CD position to the GC position, display the CPDLC interface on the screen and hit the “Shutdown” key on the keyboard and click “Yes” to confirm shutdown. This will allow GC to clear any flight plan errors without also having to clear them from the CD position.
12. Mark all IFR flight progress strips subject to flow control with a slanted line in box 13. Note in box 9C adjacent to box 13 the appropriate method of obtaining the release. (i.e. TMU Line, IDAC)
13. Add a comment to the ATIS if Runway 31 is being used for departures and the JWN PAJA DZ is active.

B. Verbal Clearances:

1. Place a check mark in box 12 of the flight progress strip to indicate a clearance has been issued.
2. If a revision to a flight plan is received after an initial clearance has been issued, instruct GC to return the original FPS (flight progress strip) to CD. When the aircraft calls GC for taxi, communications will be transferred to CD and the updated flight plan will be issued as a FRC. Once the revision is issued and acknowledged, CD will pass the updated FPS to GC.
3. If there are multiple flight plans for the same call sign, determine which flight plan is correct and issue as a FRC. Remove all other flight plans via FDIO.
4. Ensure that departing aircraft have the pertinent ATIS information and post the verified ATIS code letter in block 10 of the flight progress strip.
5. Assign an altitude to all departures as follows:
 - a. "Maintain 4000" to all RNAV SID aircraft requesting at or above 4000.
 - b. "Maintain 4000" to all NASHVILLE Departure Procedure (DP) aircraft requesting at or above 4000.
 - c. "Maintain 3000" to all RNAV SID and NASHVILLE DP aircraft requesting below 4000.

C. PDC Clearances:

1. PDC will be run in Auto Mode. Ensure clearances are reviewed for accuracy, route integrity, and correct the clearance verbally if necessary.
2. If issuance of PDC in Manual Mode is required, Clearance Delivery will:
 - a. Ensure clearances are reviewed for accuracy, route integrity, and correct the clearance, if necessary.
 - b. Ensure clearances contain the following information:
 - 1) Departure Procedure (DP) -- include DP transition when applicable
 - 2) Departure frequency
 - 3) Altitude information
 - c. Ensure the following are not transmitted, and are "dumped" from the pick list:

- 1) Revised clearances
- 2) Full route clearances
- 3) Clearances that have “u”, “t”, “e”, “frc” or “lck” in the pick list
- d. Report instances of routes that routinely appear with ADR’s or ADAR’s (+ routes+) that differ from the filed route to the WS/SC for forwarding to TDLS Application Specialist.
3. Place a check mark in box 12 of the flight progress strip to indicate a clearance has been issued.
4. If a revision to a flight plan is received (indicated as REV) after an initial clearance has been issued, instruct GC to return the original FPS (flight progress strip) to CD. When the aircraft calls GC for taxi, communications will be transferred to CD and the updated flight plan will be issued as a FRC. Once the revision is issued and acknowledged, CD will pass the updated FPS to GC.
5. If there are multiple flight plans in the pick list for a call sign, (indicated as MUL or *MUL*), determine which flight plan is correct and issue as a FRC. Remove all other flight plans via FDIO and dump all flight plans for that call sign from the pick list.
6. If an ALERT BOX appears on the TDLS pertaining to a PDC flight plan, Clearance Delivery must take immediate action to decipher the reason for the alert, notify the SC and promptly coordinate with other affected controllers/sectors/facilities to remedy the alert.
7. Assign an altitude to all RNAV SID and Nashville Departure Procedure aircraft as follows:
 - a. “Maintain 4000” to aircraft requesting at or above 4000.
 - b. “Maintain 3000” to aircraft requesting below 4000.

D. CPDLC Clearances:

1. CPDLC will be run in Auto Mode. Ensure clearances are reviewed for accuracy, route integrity, and correct the clearance if necessary.
2. When issuing a CPDLC clearance, Clearance Delivery will:
 - a. If a verbal clearance is necessary to override a CPDLC clearance, advise the pilot “(ACID disregard CPDLC message)”
 - b. Retain the Flight Progress Strip at the Clearance Delivery position. Place a check mark in box 12 when the clearance has been WILCO’D / ACCEPTED and forward to Ground Control.

- 1) If a revision to a flight plan is received after an initial clearance has been issued, instruct GC to return the original FPS to CD, THEN process revised clearance. Once the revised flight plan has been WILCO'D / ACCEPTED pass the new FPS to GC.
 - 2) If a revision is received after the aircraft has progressed past GC, notify the appropriate control position that an amendment is pending but not transmitted to the flight deck. Do NOT send CPDLC clearances to flight crews once the aircraft is on active runway or airborne.
- d. If there are multiple flight plans in the pick list for a call sign (indicated by MUL or *MUL*), determine which flight plan is to be issued. If the "MUL" clearance is to be issued, remove all other flight plans via the FDIO and send the clearance via CPDLC. If the *MUL* clearance is to be issued, remove all other flight plans via the FDIO and dump the flight plans from the pick list. Issue the flight plan verbally as a FRC.
 - e. If an ALERT BOX appears on the TDLS pertaining to a CPDLC flight plan, Clearance Delivery must take immediate action to decipher the reason for the alert, notify the SC/CIC and promptly coordinate with other affected controllers/sectors/facilities to remedy the alert.
 - f. Discern, via communication with pilot, issues with clearances that have been responded to as "unable" (U). Make necessary amendments, if able, and issue the revision via CPDLC. If unable to make necessary amendments "dump" the flight plan and revert to voice.
 - g. If an aircraft files a requested altitude below 4000, revise the altitude to read "Maintain 3000."

E. Straight Runway 31 Operations.

1. For GDOGG / KRSTA departures, Clearance Delivery will issue DRE departure frequency. If the clearance is issued via non-verbal means, place a 1Y in block 8A of the FPS to indicate the need for GC to issue the new frequency at the time of taxi.
2. For FLAME / TIPPN departures, Clearance Delivery will issue DRW departure frequency. If the clearance is issued via non-verbal means, place a 1X in block 8A of the FPS to indicate the need for GC to issue the new frequency at the time of taxi.

F. SVFR Departures.

1. Issue SVFR Clearances to aircraft in accordance with FAAO 7110.65.
2. SVFR Departures must be issued at or below 3,000.
3. SVFR departures will be individually coordinated with all affected sectors and issued a discreet IFR beacon code. (STARS Keyboard entry [+])

4. Special VFR- Mark the strip with all the appropriate Special VFR strip markings.

G. VFR Departures.

1. VFR departures intending to terminate radar services at the Class “C” boundary must be processed using the following format. This will generate a local discreet beacon code and will require a hand written FPS. The hand written FPS must be in accordance with Appendix 2-1.

ACID
TYPE
1T
[enter]

2. VFR departures requesting flight following to a destination must be processed using the following format. This will generate a NAS beacon code and a FPS that will be scanned to the TRACON at the time of departure.

ACID
Destination (3 character only)
TYPE
Requested Altitude
Position Symbol (i.e. 1X, 1Y, 1S)
[enter]

Note: VFR departures requesting radar services beyond the Class “C” boundary but not outside BNA ATCT airspace may utilize “compass point” destinations (i.e. EE3, SS3, NE3) in the above format.

3. Assign VFR departures an altitude as follows:

- a) 4,000 to ALL aircraft requesting above 4,000 ft.
- b) At or below 3,000 to aircraft requesting below 4,000.
- c) When SRE is open, VFR aircraft departing into SRE’s airspace requesting at or below 3500 feet, should be:
 - i) Assigned at or below 3000 feet
 - ii) Assigned the “S” tag,
 - iii) Strip must be marked in block 8 “1S”

4. Assign the Tower frequency for all departing non-noise sensitive VFR aircraft destined John C. Tune (JWN) and/or Smyrna Airport (MQY) that will remain at or below three thousand (3,000) feet.

H. Traffic Management. To the maximum extent possible, assist Ground Control with coordination with ZME TMU for items such as releases, changes to EDCTs or Ground Stop information.

5-2. FLIGHT DATA

The Flight Data portion of Clearance Delivery will:

A. Disseminate and receive acknowledgement for Weather/Data Information as follows:

1. Forward hourly and special weather observations to all Tower positions and CI-2 including:

- a) ATIS code/s
- b) Change in altimeter setting
- c) Runway change
- d) Approach/s in use
- e) Visibility observations
- f) Other pertinent changes, i.e. frontal passage, VFR to IFR, IFR to VFR.

2. Forward PIREPS to SC and TRACON Positions as appropriate.

3. Transmit via telephone or ASOS computer/IDS VOID to the weather observer the tower visibility observations.

B. Formulate Digital ATIS (D-ATIS) upon receipt of new weather or changes in airport conditions. Review to ensure accuracy before disseminating ATIS.

C. When D-ATIS is inoperative, one ATIS will be formulated on the manual ATIS Recorder as prescribed in BNA SOP Chapter 4-3.

D. Ensure accuracy of Systems Data Area information relevant to current ATIS code/s, approach in use, runway/s in use, and altimeter setting. Inform tower positions and the appropriate TRACON coordinator(s) of ATIS code changes and reason for the change.

E. Disseminate Field Condition Reports (FCR) to SC and operating positions as appropriate.

F. Make all required entries in FDIO (TDLS).

G. Review and disseminate traffic management messages as follows:

1. Review FDIO messages pertaining to traffic management restrictions that apply to BNA departures.
2. Notify SC of traffic management messages which affect BNA.
3. Retain FDIO messages containing traffic management information until no longer effective.

H. If the Cab Coordinator position is closed, make visibility observations when visibility is less than 4 miles and enter into the ASOS and IDS computers.

CHAPTER 6: GROUND CONTROL

6-1. GENERAL RESPONSIBILITIES

Ground Control (GC) must:

- A. Control all vehicular, pedestrian, and aircraft movement on the airport designated movement areas except active runways and issue advisories when practical on non-movement areas depicted in Appendix 6-1.
- B. Assign runways for departing aircraft in accordance with BNA Standardized Runway Operations in SOP Chapter 17.
- C. Change aircraft/vehicles that need to taxi/proceed on or along an active runway to the appropriate Local Control (LC) frequency (see Appendix 6-2).
- D. Transfer control of departures to LC when the appropriate sequence has been applied.
- E. Identify runway and use terms consistent with traffic flow when coordinating runway crossings.
- F. Record taxi time block 15.

NOTE: A report is required for all runway crossings completed.

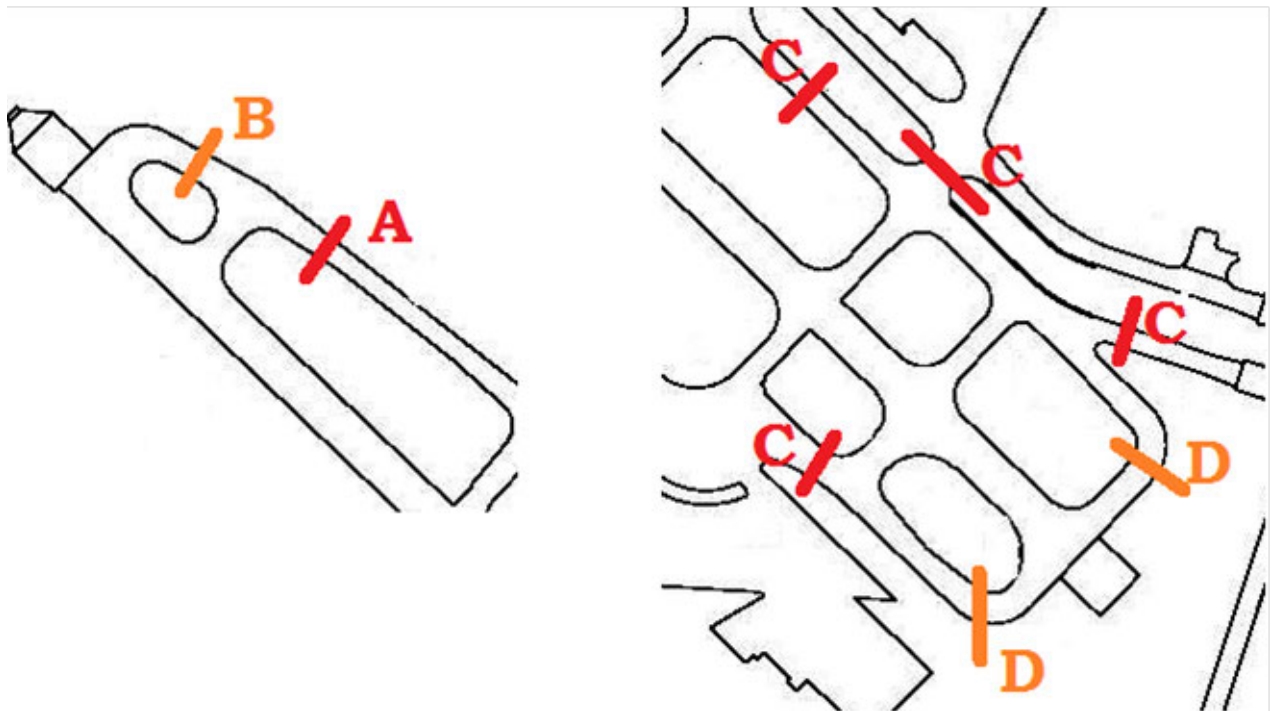
- F. For operational purposes (i.e. when delivering information directly to the pilot), wind information must be taken directly from the TDWR Centerfield Wind Indicator and the altimeter setting must be taken from the Digital Altimeter Setting Indicator (DASI).
- G. Group V Series and larger aircraft (B747 series, B777 series B787 series, C5 series, AN24, A330, A340, B52, etc.) will be taxied in accordance with Appendix 6-3.
- H. When weather conditions specified in the FAA JO 7110.65 are reported, issue instructions that restrict aircraft and vehicles from entering the ILS Localizer/Glide Slope/Obstacle Critical Areas depicted in Appendix 6-4.
- I. Inform the SC of any special request that will impact the lighting panel settings.
- J. Inform the SC of any information pertaining to an “OPS FOD” or “ARFF ALERT” event.
- K. When de-combining the CD position from the GC position, display the CPDLC interface on the screen and hit the “Shutdown” key on the keyboard and click “Yes” to confirm shutdown. This will allow CD to clear any flight plan errors without also having to clear them from the GC position.

6-2. BOMB THREAT AND HAZARDOUS CARGO AREA

- A. Direct aircraft involved in a bomb threat to the K2 run-up area on the south side of Runway 13, unless otherwise directed by MNAA (see APPENDIX 6-5).
- B. Direct aircraft with hazardous cargo to the Northwest ramp area between taxiways C5 and C6, unless otherwise directed by MNAA (see APPENDIX 6-5).

6-3. RUNWAY 13/31 HOLD SHORT POSITIONS

FIG 6-3. RUNWAY 13/31 HOLD POSITION MARKINGS



- A. Ensure that aircraft and/or vehicles proceeding to Runway 13/31 are held at the appropriate locations as depicted in Figure 6-3.

1. Runway 13-

- a. ILS Critical Area - Departing aircraft which will utilize the full length of the runway must be held at this point when Runway 13 is also being used for arrivals regardless of the weather conditions.
- b. Hold Short Bar - Departing aircraft which will utilize the full length of the runway must be held at this point when Runway 13 is being used for departures only.

2. Runway 31

- a. ILS Critical Area - Departing aircraft which will utilize the full length of the runway must be held at this point when Runway 31 is being used for arrivals AND weather conditions are below 800ft ceilings or less than 2 miles visibility.
- b. Hold Short Bar - Departing aircraft which will utilize the full length of the runway must be held at this point when Runway 31 is being used for departures only OR weather conditions are at or above 800 foot ceilings and at or above 2 miles visibility.

6-4. COORDINATION

A. Ground Control must ensure the Ground Runway Status Board reflects the current operation with one of the following options for each runway (see Appendix 6-6):

- 1. The default red placards indicate the runway is active and coordination with LC is required before GC may cross the runway.
- 2. The yellow “R-X-W” buttons or yellow crossing strip may be used as a memory aid when LC approves temporary use of the runway to GC (i.e. runway crossing).
- 3. The yellow runway placard is passed from LC to GC when GC has control of the runway, but there are personnel/vehicles/equipment on or near the runway.
- 4. The green placard is passed from LC to GC when GC has control of the runway and may use it without coordination.

NOTE: The status of the runway must remain as it is until the position having jurisdictional control verbally coordinates otherwise. All coordination must be THOROUGH and REQUIRE a verbal acknowledgement.

B. Runway 2C/20C/31 approach/departure areas

- 1. The memory aid for the ‘RWY 2C/20C ARR/DEP AREA’ (Areas 1&2) must be utilized between LC and GC to reflect ownership. GC must primarily have ownership, unless requested by LC to land RWY 20C or depart RWY 02C.

NOTE: The memory aid only applies to operations that impede arrivals and departures. For example, in a North Operation when LC owns the Approach/Departure Areas, GC may move

vehicles in Area 1 without coordination. Also while in a North Operation, GC may taxi through Area 2 without coordination (exception: B757 and Heavy Aircraft)

2. When Runway 31 is a designated arrival runway, coordinate with Local Control prior to entering Area 3 with a large or heavy aircraft (see Appendix 6-7).
- C. Coordinate with LC when an aircraft is taxied to a runway designated inactive. All coordination must be **thorough** and **requires** a verbal acknowledgement.
- D. Notify LC when an aircraft taxis to an intersection for departure. Enter the runway and intersection on flight progress strip as per Appendix 6-8.
- E. Coordinate with ZME TMU for items such as releases, changes to EDCTs or Ground Stop information. When assistance is needed, request it from Clearance Delivery.

CHAPTER 7: LOCAL CONTROL

7-1. GENERAL RESPONSIBILITIES

Local Control must:

A. Provide Air Traffic Control services in areas depicted in Appendices 6-1 and 9 as appropriate. Local Control's airspace extends to an 8-mile arc on the departure end (radials are listed in Automatic Release Area, 7-3-4), surface to 4,000', and extends to a 5 mile arc on the arrival side, surface to 2,000'. Local does not own the 500 feet above for VFR flights.

B. Ensure separation between arrivals within 5 miles of the runway. If unable to provide visual separation, including arrivals landing Runways 13/31 and the parallel runways, notify the TRACON and state at what distance visual separation can be provided.

NOTE: The Tower cannot provide visual separation between aircraft in lieu of the TRACON issuing 30 degree or less turns to final to satisfy FAA JO 7110.65, paragraph 7-4-4b3.

C. Use the TDW display for any terminal RADAR functions.

D. When weather conditions dictate, instruct aircraft/vehicles to hold short of the ILS Localizer & Glide Slope Critical Area depicted in Appendix 6-3.

E. Display MQY GI text filters one and two for MQY weather, approach in use, runway in use, and other pertinent information.

F. Utilize Landing Clearance Memory Aid Procedures as follows:

1. During normal day time operations, LC must use one of the following memory aids when issuing a landing clearance to all aircraft:

- a. Via Automation: Turn the aircraft blue on the TDW using the middle slew key after issuing landing clearance. TRACON must advise LC/CC2 if the tag was manually entered, because the aircraft data will not populate the Last-to-Land list.
- b. Via the Writing Pad: Utilize the writing pad by writing down the call sign in sequence, check mark by the call sign to show landing clearance issued, and line through the call sign to show the aircraft has exited the runway.

2. Writing Pad procedures are mandatory at night, during the day when any part of the runways are not visible due to weather or other obstructions, and during equipment outages (i.e. DSA, or RADAR outage).

G. When necessary due to mixed departure/arrival departure runway configuration, traffic, runway closure/occupancy, or other hindrances to efficiency, LC may request "Gaps". "Gaps" will constitute all arrivals will be 5 miles in trail and 170 knots or less.

H. Report indications or pilot reports of system component failures to the SC as appropriate.

- I. For operational purposes (i.e. when delivering information directly to the pilot), wind information must be taken directly from the TDWR Centerfield Wind Indicator and the altimeter setting must be taken from the Digital Altimeter Setting Indicator (DASI).
- J. Issue Runway Condition Codes not contained on the ATIS prior to departure, or as soon as possible after receipt of any changes in previously issued RCC information.
- K. Inform the Cab Coordinator (CC2) and SC position of any data received that will affect the airport surface operations.
- L. Inform the SC of any special request that will impact the lighting panel settings.
- M. Assume the responsibilities of CC2 position, which are pertinent to Local Control when CC2 is not staffed.
- N. Inform the SC of any information pertaining to any Airfield Alert

7-2. DEPARTURE PROCEDURES

- A. Assign a heading or RNAV SID which will place departing aircraft in the appropriate departure controller's airspace and within the "Automatic Release Area."
 - 1. For all noise abatement aircraft use the appropriate SID or headings listed in BNA 7232.38, Informal Runway Use Program.

NOTE: During a "Straight Runway 31" operation, noise abatement GDOGG and KRSTA departures must be issued a 050 heading. Noise abatement TIPPN and FLAME departures must be issued a 280 heading at 1DME due to the realignment of DRW/DRE airspace.

- 2. For all non-noise abatement aircraft use Automatic Release Headings as follows:

From a degree bearing from the center of the airport to an 8 mile arc, the Automatic Release Area Boundaries are as follows:

- a. North Configuration

- 1. 275 degrees to 105 degrees
- 2. LC1 de-combined: 275 degrees to 020 degrees
- 3. LC2 de-combined: 035 degrees to 105 degrees

- b. South Configuration

- 1. 105 degrees to 290 degrees
- 2. LC1 de-combined: 220 degrees to 290 degrees
- 3. LC2 de-combined: 105 degrees to 200 degrees

NOTE: When in a south configuration and Smyrna (MQY) is using Runway 32, eastbound IFR aircraft (including noise abatement) should be turned no further left than a 160 heading.

- c. Runway 31 Configuration: 235 degrees to 065 degrees
- d. Runway 13 Configuration: 030 degrees to 240 degrees
- D. Night Time Operations (0000-0530L): Issue heading 1DME 280 to all turbojet aircraft that depart Runway 31.
- E. Ensure that auto-acquisition of departing aircraft is accomplished. If the auto- acquisition is not accomplished within three (3) miles off the runway end, affect coordination with the appropriate departure control position.
- F. To the maximum extent possible allow missed approach aircraft to over-fly the runway to the departure end. Issue missed approach instructions including an altitude up to 4,000' and a heading that complies with the automatic departure release area for the active runway configuration. Coordinate changes to previously issued planned missed approach instructions.
- G. Transfer of communications of a departing aircraft to a radar position constitutes transfer of control for climb and turns away from runway heading within the towers airspace depicted in Appendix 9. For IFR departures destined John C. Tune (JWN) and MQY, transfer of communications constitutes transfer of control for descent and turns away from runway heading within tower's airspace.
- H. Verbally coordinate with the affected radar position(s) when an aircraft must not be turned. This is to alert them that subsequent departures will be assigned headings between that aircraft's assigned heading, route and/or assigned gate. State "do not turn (ACID)" or "(ACID) your control for turns reference (ACID)".
- I. Verbally coordinate with the affected radar position(s) when an aircraft must not be climbed. This is to alert them that subsequent departures will be assigned headings between that aircraft's assigned heading, route and/or assigned gate. State "do not climb (ACID)" or "(ACID) your control for climb reference (ACID)".
- J. Ensure departing IFR aircraft are released in compliance with Traffic Management restrictions. Departing aircraft that have begun takeoff roll must not be stopped to comply with these restrictions.
- K. Enter departure times in block 18.
- L. Refer to SOP Chapter 18 Opposite Direction Operations.
- M. Retain control of departing VFR non-noise sensitive aircraft destined JWN and/or MQY that will remain at 3,000' or below within the airspace delegated to Local Control/s. The most direct route practicable must be assigned these aircraft.

- N. Retain control of CASHH departures until outside Class C airspace. CASHH arrivals will not continue past the TP until either landing clearance, entrance into pattern traffic or “proceed to the Guard Ramp” has been received.

NOTE: Do not utilize the Speedway route when BNA ATIS advertises arriving Runway 31 or departing RWY 13. Do not utilize the Skyline route when BNA ATIS advertises arriving Runway 13 or departing Runway 31.

7-3. DEPARTURE STRIPS/EFSTS

- A. VFR departure strips that will terminate radar service with LC will be maintained at the LC position. Once radar service has been terminated the strip will be filed in the strip basket.
- B. Deliver IFR and VFR flight following departure strips to the TRACON via EFSTS. Scan the departure strip when the aircraft starts their departure roll.

NOTE: The following charts are to be used when determining what information is required to be entered into the EFSTS. Any information in addition to the required listed below is acceptable. When “off noise headings” are declared by Tower, ALL runways and headings must be input for ALL aircraft when using EFSTS.

North Operation-

All Jet and 4 engine Turboprop aircraft:

1. Runway assignment will be entered.
2. If a heading is issued to a departure other than listed below, it will be entered on the strip:
 - 2L – Runway Heading
 - 2C – Heading 015
 - 2R – Heading 055
 - 31 – ALL DRW Gates – 1 DME Heading 280
 - ALL DRE Gates – Heading 050
 - 13 – ALL Headings will be entered

All other aircraft:

1. Runway assignment is optional.
2. Any assigned heading will be entered on the strip.

South Operation-

All Jet and 4 engine Turboprop aircraft:

1. Runway assignment will be entered.
2. If a heading is issued to a departure other than listed below, it will be entered on the strip:
 - 20L - ALL DRE Gates - Runway Heading
 - ALL DRW Gates – Heading 220
 - 20C - TIPPN/FLAME Gates - Heading 180
 - ALL OTHER DRE Gates – Heading 140
 - DRURY Gates – Heading 220
 - ALL OTHER DRW Gates – Heading 275

20R - TIPPN/FLAME Gates - Heading 180
- ALL OTHER DRE Gates – Heading 140
- DRURY Gates – Heading 220
- ALL OTHER DRW Gates – 2 DME Heading 260

13/31 - ALL Headings will be entered

All other aircraft:

1. Runway assignment is optional.
2. Any assigned heading will be entered on the strip.

RWY 31 Operation-

All Jet and 4 engine Turboprop aircraft:

1. Runway assignment must be entered.
2. If a heading is issued to a departure other than listed below, it will be entered on the strip:
31 - ALL DRW Gates – 1 DME Heading 280
- ALL DRE Gates – Heading 050

All other aircraft:

1. Runway assignment must be entered.
2. Any assigned heading will be entered on the strip.

RWY 13 Operation-

All aircraft:

1. Runway assignment must be entered.
2. All headings will be entered on the strip.

After entering all the information either via keypad, scanning ready-made strips, a combination of both, the very last thing you do is scan the flight progress strip. Do not do a pre-scan of the departure. Scan the flight progress strip when the aircraft starts their departure roll.

C. Local Control does not have to write the departures on the pad since the strips will remain in the Tower.

D. Local must force east departure strips to the DRE EFSTS printer when all of the following conditions exist:

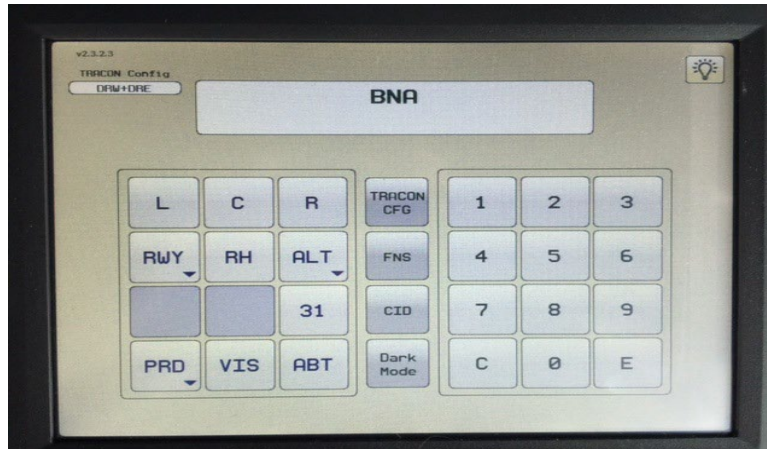
1. The flight progress strip does not have a PDR
2. The flight progress strip does not have a RNAV SID
3. The flight progress strip does not have a 3 letter identifier.

NOTE: Whenever in doubt, force the strip to the appropriate EFSTS printer.

E. Local control must force aircraft that are marked “1S” in block 8 of the strip via the ETVS to SRE.

7-4. EFSTS SCANNER/KEYPAD OPERATIONS

- A. The following are operating procedures for the scanner/keypad. After entering all the information via the keypad, scan the flight progress strip or enter via CID. This will send the departure strip to the appropriate printer in the TRACON.



All the functions mentioned below will put information in the keypad preview area. Do not hit the "ENT" key after any of the steps mentioned below.

"L", "R", "C" and "31" Key:

Push once and it puts the corresponding entry in box 16, pushing again removes the entry from the keypad.

"RH" Key:

Push once, "RH" appears in the keypad window. Pushing "RH" again removes it from the keypad. If only numeric buttons are pushed, the keypad enters the digits as a heading. If only two digits are entered, a zero is automatically entered as the last digit. If any digit other than a zero is pressed as the third digit, a five will replace the last digit. Any of these entries will put the heading in box 17.

"ALT" Key:

ALT appears in the keypad window, the controller can either select an entry from the drop down selection box or enter 2 digits (for assigned altitude). This will put an "A" followed by the 2 digits entered in box 8, i.e. "A30"

"VIS" Key:

Puts a "VIS" in box 10. This is to indicate that this aircraft is maintaining visual separation from the preceding departure.

"ABT" Key:

Use when a scanned departure strip will no longer depart. Press the "ABT" key and when the strip is rescanned an "ABT" will appear in box 13. This indicates the strip can be discarded from the TRACON position.

"PRD" Key:

Selecting this button will bring three options: X, Y or S. This is to force a strip to a different printer. i.e. You modify a FLAME to 1X in a north configuration. You must force the strip to the DRW (X) printer.

"FNS" Key:

Selecting this button allows a previously scanned strip to be rescanned.

- B. The 1230-2030 shift SC must bring the day's strips to the TRACON at the end of the shift and notify the WS/SI of any reportable delays.
- C. Special VFR aircraft will need to be verbally coordinated with RADAR.
- D. LC does not have to enter altitude on EFSTS strip if it conforms to the SOP.
- E. If the EFSTS beeps 3 times when a strip is scanned, this means the strip has already been scanned. Any changes must be coordinated.
- F. If the EFSTS beeps 5 times when a strip is scanned, this means the flight plan has timed out.

7-5. LINE UP AND WAIT (LUAW)

LUAW is authorized at the Nashville International Airport in accordance with FAA JO 7210.3 and the provisions listed below.

A. Position staffing and consolidation during LUAW:

1. LUAW operations are **prohibited** when any other position is combined to the Local Control position.
2. SC position **should not** be combined with any other position. (To ensure clarity, "should not" means, while not prohibited, it is not a desired or expected operating practice.)

B. LUAW operations are **prohibited** at an intersection between sunset and sunrise.

C. LUAW operations are **prohibited** when the departure point is not visible from the Tower unless the runway is designated as a departure only runway.

D. Supplemental procedures for conducting LUAW on RWY 20C are as follows:

1. For all aircraft, except air carriers, assigned to depart RWY 20C, Local Control must do either of the following:
 - a. Issue a LUAW clearance, in accordance with FAA JO 7110.65 and FAA JO 7210.3, and after LUAW clearance has been issued, do not issue a take-off clearance until the aircraft has reached/is passing the RWY 20C hold bars.
 - b. If not using LUAW, do not issue a take-off clearance until the aircraft has reached the RWY 20C hold bars.
 2. For air carrier aircraft that are assigned to depart RWY 20C, Local Control is not required to LUAW. LC must utilize proper scanning techniques to minimize the possibility of a Wrong Surface Departure on Taxiway Sierra.
- E. During LUAW operations, Local Control must OFFSET the departure strip in the departure bay to indicate when an aircraft is in position and holding on the runway for departure.
- F. Do not authorize an aircraft to LUAW if an aircraft has been cleared to land on the same runway.
- G. Do not permit more than one aircraft at a time to LUAW on the same runway.
- H. Do not issue a landing clearance if an aircraft has been issued a clearance to LUAW on the same runway.
- I. Do not issue a clearance to a small aircraft to LUAW behind a departing heavy jet to apply the wake turbulence interval.
- J. There are no restrictions for LUAW dependent upon traffic or complexity.

7-6. VFR TOWER OPERATIONS

- A. Pattern Altitude for props is 1600 feet. Pattern altitude for jets is 2100 feet.
- B. VFR helicopter operations:
1. Utilize safe practices such as midfield crossings, ‘paper stops’ by assigning clearance limits east and west of the field, and holding clear of extended runway centerlines to positively control helicopter traffic, especially with transient or unfamiliar pilots. Do not rely solely on pilot-applied visual separation to ensure safety.
 2. VFR helicopters transitioning via midfield crossing should normally be accomplished at or above 2500MSL to protect for the missed approach course.

Phraseology Examples:

"Hold east of the Quarry, traffic landing/departing Rwy _____ maintain 2500'. Expect a mid-field crossing north of the tower"

***“Hold west of the Gold Building, traffic landing/departing Rwy _____ maintain 2500’.
Expect a mid-field crossing north of the tower.”***

3. Do not allow aircraft/helicopters to under-fly the final of jet arrivals within four (4) NM of the landing threshold.
4. Use extreme caution and positive control when allowing aircraft/helicopters to cross the flight path of jet/turbo-prop arrivals within three (3) NM of the landing threshold.

C. Overhead approaches:

1. Restrict overhead approaches by non-civil, high performance, turbojet aircraft to Runway 13/31. Overhead approaches to other runways may be permitted when operationally necessary.
2. Overhead approach altitude will be 2,100’.

7-7. COORDINATION

A. Local Control must ensure the Local Runway Status Board reflects the current operation with one of the following options for each runway (see Appendix 6-6):

1. The green placards signify when a runway is active and available for use.
2. LC must flip the green placard to yellow when the runway is temporarily unavailable (i.e. runway crossing, inspection, etc.)
3. LC must pass the runway placard to GC when the runway is closed/inactive or the current operation dictates GC has control of the runway.

NOTE: The status of the runway (active or inactive) must remain as it is until the position having jurisdictional control verbally coordinates otherwise. All coordination must be THOROUGH and REQUIRE a verbal acknowledgement

B. Coordinate with Ground Control when aircraft are instructed to proceed beyond the taxiway/runway area used to exit the landing runway and accomplish the coordination prior to the aircraft entering the adjacent taxiway/runway area.

C. Coordinate with the appropriate TRACON position:

1. For release of departures using a runway not covered by the automatic release area.
2. For unplanned missed approaches. Include the assigned heading if other than standard for any other departure.

7-8. RUNWAY 2C/20C/31 APPROACH/DEPARTURE AREAS.

A. Do not conduct departure operations on Runway 2C when there are aircraft in Area 1 of Appendix 6-7.

- B. Do not conduct departure operations on Runway 2C when there are Heavy or B757 aircraft in Area 2 of Appendix 6-7.
- C. Do not conduct arrival operations on runway 20C when:
 - 1. Aircraft or vehicles are in Area 1 of Appendix 6-7.
 - 2. Aircraft are in Area 2 of Appendix 6-7.
- D. Do not conduct arrival operations on Runway 31 when:
 - 1. Large or Heavy aircraft are on Taxiway H in Area 3 of Appendix 6-7.
 - 2. Heavy aircraft are on Runway 2R/20L in Area 3 of Appendix 6-7.
- E. Do not conduct full length departure operations on Runway 31 with a DC-10, KC-10, L1011, or MD-11 when aircraft are in Area 3 of Appendix 6-7. Entering Area 3 is allowed after the heavy 3-engine departure has passed TWY T4.

NOTE: The memory aid for the 'RWY 2C/20C ARR/DEP AREA' (Areas 1&2) must be utilized between LC and GC to reflect ownership. GC must primarily have ownership, unless requested by LC to land RWY 20C or depart RWY 02C.

7-9. SPLIT LOCAL PROCEDURES

- A. When LC-1/LC-2 are split, the following procedures apply:
 - 1. LC-1, West LC, frequency 118.6/257.8.
 - 2. LC-2, East LC, frequency 132.35/348.6.
- B. Departure Procedures. Departure headings are delegated to the respective LC as follows. Each LC must coordinate aircraft entering into the other LC's delegated airspace.
- C. When runway 02/20 are in use- LC-2 has jurisdiction over runway 20L and 2R. LC-1 has jurisdiction 20R/2L, 20C/2C and 13/31.
- D. The airspace east of the line depicted on APPENDIX 7-9 extending to the north and south boundaries of the class Charlie airspace up to and including 4,000'.

7-10. SPECIAL EVENTS PROCEDURES

- A. LC-2 may be utilized as a special event position as needed to accommodate local events and Temporary Flight Restrictions (TFR).

- B. During Special Events Procedures, LC-1 retains all responsibility for all arrivals and departures and retains all headings for the runway configuration in use.
- C. LC-2 will be delegated airspace as needed to accommodate the requested operation. The SC must clearly define the airspace delegated to LC-2, and must coordinate the operation with LC-1 and all affected TRACON positions.

CHAPTER 8: CAB COORDINATOR (CC2)

8-1. CAB COORDINATOR DUTIES

- A. Cab Coordinator will be opened when traffic volume and/or complexity require additional personnel to accomplish the duties listed below.
- B. Advise all open Tower Cab positions and SI when Cab Coordinator is opened or closed. When Cab Coordinator is closed, position duties will be delegated as follows:
 - 1. SC will assume the duties notated in C, D, and E.
 - 2. LC will assume the duties notated in F.
 - 3. CD/FD will assume the duties notated in G.
- C. Act as the focal point for coordination between the TRACON and Tower Cab, with the purpose of reducing distractions at the Local Control position and surveilling critical areas of the airport operations.
- D. Coordinate with the appropriate TRACON position(s):
 - 1. Change(s) in the runway configuration.
 - 2. When “Gaps” are required in the approach interval or when the interval can be decreased.
 - 3. When official visibility changes from IFR to VFR or VFR to IFR.
- E. Coordinate with the SI when opposite direction operations are approved.
- F. Coordinate concerning the use of inactive runway(s) with/between Local Control and Ground Control as appropriate. Coordination must be complete with verbal acknowledgement.
- G. Make visibility observations when visibility is less than 4 miles and inform Clearance Delivery for entry into the ASOS and IDS computers.

NOTE: All coordination with the TRACON MUST be conducted via a recorded line

CHAPTER 9: TRACON

9-1. GENERAL

A. Frequencies:

Use **Table 9-1** to determine required frequencies to be selected or monitored.

Table 9-1 Frequencies Selection	
Select radio frequencies:	Monitor frequency:
DRW - 119.35/372.0	124.55 / 121.5/243.0
ARW - 120.6/372.0	121.5/243.0
DRE - 118.4 / 360.7	121.5/ 243.0
ARE - 127.175/ 360.7	121.5 / 243.0
FRE - 124.75	
FRW - 133.0	
SRE - 128.75 121.7 #	
Table 9-1 NOTE: # As necessary when Smyrna Tower is not operational.	
Table 9-1 NOTE2: Only one position is required to monitor emergency frequencies.	

B. Provide air traffic control services and ensure separation between aircraft and adjacent airspace within the airspace depicted in Appendix 9 in accordance with the runway configuration. VFR altitudes 500' above each altitude depicted in Appendix 9 except for Local Control are the responsibility of the underlying position. VFR altitudes 500' above Local Control's airspace are delegated to the appropriate overlying Departure/Arrival Control position. Maximum usable altitude without coordination with Memphis ARTCC is 15,000'. Use only cardinal altitudes for IFR aircraft and cardinal plus 500' for VFR/CLASS C aircraft unless the altitude provides applicable vertical separation from adjoining airspace or other aircraft.

NOTE: Do not assign VFR aircraft that may have to be vectored an altitude below the MVA. Assign an AOB (at or below) altitude that meets the MVA.

C. Not turn departures back towards the extended runway centerline without prior coordination with Local Control. Exceptions to this are:

1. DRE may turn turbojet departures east off of the runway 2C H015.

2. While in a North configuration, DRW may turn turbojet KRSTA and GDOGG departures off runway 31 (H280) back towards the gates once noise abatement procedures have been satisfied.
- D. Not turn an aircraft when notified by the Tower. Tower will state "do not turn (ACID)" or "your control reference (ACID)..." indicating that subsequent departures will be assigned headings between that aircraft's assigned heading, route and/or assigned gate.
- E. Not turn/vector aircraft on mandatory headings for noise abatement until three miles from the departure end of the runway or at or above 3,600 MSL whichever occurs first.
- F. Provide standard separation services to VFR aircraft practicing instrument approaches at the following airports: BNA, JWN, MBT, XNX, M54, MQY, M91, and 1M5. Standard separation will commence at the point the VFR aircraft is "cleared" for the approach and will end each time radar service is terminated. Standard separation will begin on the missed approach when radar contact is re-established if specifically requested and approved in advance by the controller. This is IAW the most current Letter to Airmen.
- G. All controllers must be familiar with the MSAW aural alarm areas (10 mile radius around the airport, in addition all aircraft being worked or quick looked).
- H. Ensure that all STARS tracked over flights indicate en-route status and non-mode C aircraft have a manually entered altitude. (Altitude ### slew) Manually entered altitude will be indicated with a *. Additionally, overflights landing at an airport covered by an adjacent airspace LOA must have the destination entered in scratchpad 2 (+) of the full data block (STARS FDB).
- I. Once the pilot has advised receipt of the current ATIS, ensure the assigned runway and type of approach for all arriving aircraft to the primary airport is displayed in the STARS FDB. (See Appendix 21-1) Ensure the assigned runway and type approach for all arriving aircraft to a Satellite airport is displayed in the STARS FDB. (See Appendix 21-1)
- J. Display MQY GI text filters one and two for MQY weather, approach in use, runway in use, and other pertinent information. All positions must display the MQY text filters.
- K. Refer to Chapter 17 of this Order for Opposite Direction operations.
- L. Process Weather Information
1. Forward Pilot Reports (PIREPS) as soon as practical to the WS/SI for dissemination to the appropriate positions and impacted sectors.
 2. Disseminate SIGMETS and CWAs as appropriate.

M. Process NOTAM Information

1. Forward reports of outages to the WS/SI.
2. On first contact or as soon as possible thereafter, and subsequently as changes occur, inform an aircraft of any abnormal operation of approach and landing aids, and of destination airport conditions that might restrict an approach or landing. This includes Runway CCs. This information may be omitted if it is contained on the ATIS and the pilot states the appropriate ATIS code.

NOTE: A pilot stating they “have the NOTAMS” does not relieve the controller of the responsibility of issuing airport conditions that might restrict an approach or landing.

N. Via Writing Pads, keep record of Call sign, type and altitude information on KBNA Arrival traffic until strips are generated when any of the following conditions exists:

1. The position is operating on FSL only or DSA only mode for one hour or greater or if by unscheduled outage [or]
2. Operating on a single RADAR feed.
 - a) QOJ (Joelton LRR) without any ASR-9 for one hour or greater or if by unscheduled outage [or]
 - b) Operation on an ASR-9 single channel without QOJ LRR available for one hour or greater or if by unscheduled outage.

O. Mark Flight Progress Strips in accordance with Chapter 9-4 for all Departure/Satellite/Overflight strips and also when KBNA Arrival strips are generated.

P. To the extent that traffic and workload will permit, track controlled area-intruding aircraft to the destination airport and attempt to obtain the identification of the aircraft. Aircraft that depart the Nashville terminal area must be handed off to Memphis Center and/or Fort Campbell ARAC. These facilities should be provided with an explanation for the hand-off and a request that the suspect aircraft be tracked and identification obtained if practicable. Similarly, if Memphis Center (ZME) and/or Fort Campbell (HOP) hands off to Nashville approach an aircraft suspected of intruding into a controlled area, they should advise BNA approach of the nature of the handoff, and approach should attempt to determine the aircraft's identification. Aircraft that are identified must be reported to the Nashville FSDO as prescribed in the FAA JO 7210.3.

Q. Assume the responsibilities of Radar Coordinator (CI1) or Data Coordinator (CI2) positions that are pertinent to the Radar position when CI1 or CI2 is not staffed.

R. Assume the responsibilities of West Radar Associate (AD) or East Radar Associate (DD) positions that are pertinent to the Radar position when AD or DD is not staffed.

- S. Verbally issue all ADRs (between the pluses) with the following exception: If the ADR only contains the departure gate name between the pluses, the entire ADR will be omitted.

9-2. COORDINATION

- A. Coordinate as necessary with the Tower through the Cab Coordinator (CC2) or SC.
- B. Coordinate with appropriate positions concerning planned Missed Approaches, Low Approaches, Touch and Go's, Optional Approaches, and any other unusual situations. This can be accomplished either verbally or through the scratch pad information. Display the receiving position's symbol in the scratch pad area for planned Missed Approaches. (See Appendix 21-1) Issuance of all missed approach or climb out instructions must be primarily the responsibility of the Local Control position.
- C. All Non-Conforming arrival runway requests will be coordinated with the Tower. If this coordination involves "ODO", the requirements outlined in Chapter 17 must also be adhered to.
- D. All Runway 13/31 arrivals will be coordinated with the Tower when in a Runway 2 or 20 configuration.
- E. When a point-out is received from ZME or HOP, the Nashville controller must make a keyboard entry of the aircraft beacon code preceded by the* symbol. This entry (*beacon) will tag the aircraft as an overflight (OV Beacon) in the event the aircraft is not already tagged. If a full data tag already exists on the aircraft, this function will place the overflight tag in the tab list. This tag should be terminated causing the OV Beacon tag to auto-acquire ensuring the appropriate point-out traffic count. Ensure to differentiate between IFR and VFR point outs.
- F. Operational personnel in the TRACON shall utilize a memory aid/memory jogger to reflect that arrival information has been coordinated with the receiving facility and communications have been transferred. These include, but are not limited to: Data-block scratch pad indicators, changing the color of the data-block and/or orienting data-block in a specific direction, annotating flight progress strips, text and/or symbols on the STARs display, written notes, IDs entries, and use of other indicators to ensure situational and shared awareness of completed and pending ATC actions.

9-3. RADAR SETUP

- A. Set radar ranges to a minimum of 45nm for AR/DR positions, a minimum of 20nm for FRW/FRE.

- B. Set the altitude filter limits to display Mode S to encompass all altitudes under the controller's jurisdiction. Set the upper limits no lower than 1000 feet above the highest altitude for which the controller is responsible.
- C. Weather Levels of moderate intensity or greater must be selected with a brightness level high enough that the weather can be easily seen on the TCW/TDW. When weather of light intensity is the only weather detected by the radar, it must be displayed.
- D. Select the appropriate radar video map number from the DCB/DCP pertinent to the flow of traffic. This can also be accomplished by incorporating in your presets.

NOTE: In the event of equipment outage or malfunction, notify the WS/SI/SC.

9-4. TRACON STRIP MARKING

The following strip marking annotations will be used in addition to those specified in FAA JO 7110.65: (See Figure 9-4)

FIGURE 9-4 (FAA FORM 7230-8)

1	2A	5	8	9	9B	10	11	12	
2		6	8A			13	14	15	
3		7	8B		9C	16	17	18	
4									9A

TRACON Strip Marking

Block	Information Recorded
8A	R indicating radar contact / Circle indicating inter-facility handoff has been effected / Line through to indicate radar service terminated
8B	REQUIRED USE , when the voice recorders are not operating and strips are being used at the facility. This space is used to record reported RA events when the voice recorders are not operational and strips are being used at the facility. The letters RA followed by a climb or descent arrow (if the climb or descent action is reported) and the time (HHMM) the event is reported.
9A	- Assigned altitude - Highlight the FRC requirement by boxing or circling the "O FRC" - ✓ after "O FRC" indicating full route clearance issued - HFR indicating clearance issued but hold for release / line through to indicate release
9B	- For IFR arrivals into uncontrolled airports, "CL HHMM" to indicate the time of IFR cancellation
9C	- STOP (indicating ground stop, line through to indicate ground stop cancelled)
10	ATIS Code or WX to indicate current weather received
12	✓ (Check Mark) indicating clearance issued
13	- Type approach requested - Release time/Clearance void time

14	- Type landing requested
15	- Missed approach instructions issued
16	- Type approach requested - Departure runway
17	- Type Landing requested
18	- Missed approach instructions issued

Note: For aircraft requesting multiple approaches (Box 13-18), line through each completed portion as the flight progresses. (e.g. Approach clearance issued, and missed approach executed, line through Box 13 and 15)

EXAMPLES-

N46MB	5613	E1508	150			
PA46/G	BNA 297/035	(R)	KPHT KTRI			
994	ZCM					

N998BM	4357	A1437	IFR		WX	
FA20/L	KXNX	R	30			
022	KXNX	RAT 2032	KJWN	Q 2045	ILS	FS

N615SM	6660	A1452	IFR		WX	
S22T/G	BWG 244/012	R	30		G17 TGY	
700	BNA 012/032		KXNX	Q 1531	G35 FS	

DAL927	1670	KBNA	KBNA GDOGG3 FAPER IMPEL			
B712/L	P1442	(R)	WWOOD HANBL1 KDTW			
085	350		150		C	

N609MH	1636	KJWN	KJWN TIPPEN BRXTN MDTWN			✓
P180/L	P1515	(R)	HLNDS BUKHD1 KPDK			
384	210		IFRC ✓ HFR STOP	-25 20		

9-5. CHANGING EFSTS PRINTER CONFIGURATIONS

(This is for opening and closing departure positions. It does not affect ZME printer configurations):

When Departure Radar East opens or closes, or during a Runway 31 configuration, the SI or designee will scan the appropriate ready-made configuration strip. Alternatively, the SI could have the SC change the configuration on any keypad by selecting the TRACON CFG button and choosing the appropriate option from the drop down menu.

Change Configuration to "ALL DRW"



EVERYTHING TO DRW (ONE HOLE WEST SIDE) (DEFAULT CONFIG)

Change Configuration to "ALL DRE"



EVERYTHING TO DRE

Change Configuration to "ALL SRE"



ALL STRIPS PRINT AT SRE (EQUIPMENT TESTING)

Change Configuration to "RWY 31"



RUNWAY 31 CONFIGURATION (DRW & DRE OPEN)

Change Configuration to "DRW+DRE"



DRW & DRE OPEN (NORTH or SOUTH CONFIG, TWO HOLES)

CHAPTER 10. ARRIVAL RADAR WEST/EAST

10-1. GENERAL POSITION RESPONSIBILITIES

- A. Use the following procedures when prearranged coordination is being used by departure control:
 - 1. Advise the departure controller of any unusual maneuvers that might affect separation such as flow to the opposite downwind, 360s, course reversals, or abrupt turns from the normal flight track to the airport.
 - 2. Point out to the departure controller any aircraft under your control that is in or will be entering airspace where prearranged coordination is authorized that does not have an associated Full Data Block.
- B. Prior to hand off to Final Radar, ensure aircraft flying the RNAV STAR have a RNAV designator in the data block (R, L, or B). Remove the RNAV designator whenever the aircraft is taken off the RNAV route.
- C. If an aircraft landing BNA is issued an altitude clearance other than "Descend Via" or the altitude defined in SOP Chapter 10-2 or 10-3, the altitude must be entered into the data block (using '+ ###, SLEW').
- D. When stand-alone FRW/FRE positions are not staffed, ARW/ARE must remain at least 3NM from the adjacent final approach course until an approach sequence has been coordinated.
- E. BNA must advise ZME Areas 5 & 6 (BWG/BNA/SYI & GHM) when ARW/ARE is/are opened and /or closed.
- F. Altitude stacks are permitted.
- G. FRW/FRE must have control on aircraft fed to the downwind for: descent to 5000', turns to remain inside finals' airspace, and speed adjustment.
- H. VFR propeller driven aircraft must be at or below 3,000 vectored to a 3NM to 5NM base leg. Final Radar has control for turns and descent.
- I. Coordinate with Final Radar and LC for RWY 31/13 arrivals when they are not the advertised runway in use.

J. Radar and communications should normally be transferred to Final Radar as soon as practical on base leg arrivals and at least 5 miles outside the lateral confines of Final Airspace unless traffic advisories dictate otherwise.

K. Overflight Traffic: Arrival must indicate to the receiving controller, verbally or via flight progress strip, if an IFR or VFR overflight is vectored off-course.

L. BNA Satellite Arrivals: Satellite Radar East has control for turns and descent on contact.

10-2. ARRIVAL RADAR WEST (ARW)

ARW must:

1. Deliver BNA arrival aircraft to Final Radar descending to 7000' and on a vector inside the aiming brackets.
2. Aircraft must be assigned Runway 20R/C 2L/C.
3. When initiated by Final Radar, downwind fed aircraft must be vectored to an area west of JWN airport. Aircraft should be level at 7000' and 210kts.

10-3. ARRIVAL RADAR EAST (ARE)

ARE must:

1. Deliver BNA arrival aircraft to Final Radar descending to 6000' and on a vector inside the aiming brackets.
2. Aircraft must be assigned Runway to Runway 20L/2R.
3. When initiated by Final Radar, downwind fed aircraft must be vectored to an area east of the Nashville Superspeedway/Antenna cluster. Aircraft should be level at 6000' and 210kts.

Note: Short side arrivals must not normally be assigned a speed without finals request.

Note: When Final is not open, it is recommended that East side arrivals remain the low side and turn on the localizer at odd altitudes and West side arrivals turn on the localizer at even altitudes.

CHAPTER 11. FINAL RADAR WEST/EAST

11-1. General Position Responsibilities

- A. When the Final Radar positions are de-combined, Final Radar West (FRW) must vector aircraft to Runway 20R/C 2L/C. Final Radar East (FRE) must vector aircraft to Runway 2R/20L. When vectoring aircraft for parallel approaches, FRW must establish the approach sequence.

Note: When Final is combined, it is recommended that east side arrivals remain the low side and turn on to the localizer at odd altitudes and west side arrivals turn on to the localizer at even altitudes.

- B. Use of a writing tablet is mandatory to keep track of the arrival sequence and to ensure aircraft have been changed to tower frequency prior to crossing the outer fixes if one or more of the following conditions exist:

1. The position is operating on FSL only or DSA only mode for one hour or greater or if by unscheduled outage [or]
2. Operating on a single RADAR feed.
 - a) QOJ (Joelton LRR) without any ASR-9 for one hour or greater or if by unscheduled outage [or]
 - b) Operation on an ASR-9 single channel without QOJ LRR available for one hour or greater or if by unscheduled outage.

- C. When the STARS is operating in DSA, and Radar Coordinator (CI1) is not staffed, relay the final sequence to Local Control via the ETVS.

- D. During parallel Instrument Approaches/Visual Approaches, instruct aircraft to contact Nashville Tower at or before the final approach fix, but no further than 15 flying miles from the airport. Instrument approach aircraft should not be changed to tower prior to being established on the final approach course.

- E. Final Radar must not turn opposite bases at the same altitude.

- F. When utilizing FAA JO 7110.65 4.4.4b3 for separation, the Tower cannot be responsible for providing visual separation between aircraft in lieu of issuing 30 degree or less turns to final.

- G. Coordinate with the tower if visual separation is necessary for arrivals. This must be completed prior to losing another form of separation. If pilot derived, this must be indicated via approved scratchpad entry. (Appendix 22-1)
- H. Reduced separation (2.5 NM) on final is approved for runway 2L, 2R, 2C, and 20L in accordance with FAA JO 7110.65.
- I. When necessary due to same departure/arrival runway combinations, traffic, runway closure/occupancy, or other hindrances to efficiency, LC may request Gaps. Gaps will constitute all aircraft be at least 5 miles in-trail and 170 knots or less.
- J. Restrict overhead approaches by non-civil, high performance, turbojet aircraft to Runway 13/31. Overhead approaches to other runways may be permitted when operationally necessary. Overhead approach altitude will be 2,100'.
- K. When ARW/ARE is not staffed, coordinate with LC for RWY 31/13 arrivals when they are not the advertised runway in use.
- L. When issuing a Visual Approach clearance to Runway 31 and when deemed appropriate, provide the location of MQY airport due to MQY's close proximity to BNA and similar runway configurations. Additionally, aircraft may be instructed to cross HOLER at or above 2,600' to help alleviate confusion.
- M. When Final Radar is not staffed, Arrival East will absorb Final Radar East's airspace and Arrival West will absorb Final Radar West's airspace.
- N. Stars Coordination between BNA ATCT and TRACON: Arriving aircraft that will not enter the Local Control Automatic Release Area may be cleared to proceed direct to the airport and changed to the appropriate Local Control frequency, without coordination. The aircraft's full data block must display the proposed landing area. (See Appendix 22-1) The Radar Controller must comply with sequencing requirements IAW FAA 7110.65 7-8-2.
- O. BNA VFR helicopter arrivals must be instructed to proceed inbound to the airport and to remain clear of the runway extended centerline until instructed by the Tower. The number in flight must be coordinated if unable to enter in the data block and the requested landing area will be entered into the appropriate scratchpad. (See Appendix 22-1) Any coordination and transfer of communication to LC must occur prior to the aircraft reaching the LC automatic release area or five (5) flying miles from the airport, whichever is farther.
- P. FRW/FRE has control for: turns, speed, and descent to 5,000' on contact.

11-2 FINAL RADAR WEST (FRW)

- A. When CI1 is closed, FRW must establish the arrival sequence.
- B. FRW must vector aircraft to the Runway 20R/C 2L/C final approach course and be turned on at or above 4,000' unless coordination has been accomplished with FRE.

11-3 FINAL RADAR EAST (FRE)

- A. FRE must vector aircraft to the Runway 2R/20L final approach course and be turned on at or below 3,000' MSL unless coordination has been accomplished with Final Radar West.

CHAPTER 12. DEPARTURE RADAR WEST/EAST

12-1. GENERAL POSITION RESPONSIBILITIES

Pre-arranged Coordination:

A. Guidelines

1. When ARW/ARE is split from DRW/DRE, DRW/DRE is authorized to apply prearranged coordination procedures.
2. Departure radar positions cannot delegate the application of prearranged coordination procedures to any other operational position.
3. Prearranged coordination procedures can be applied only to aircraft that have been radar identified and with whom two-way radio communications have been established.

B. Procedures

1. DRE may climb through the ARE airspace.
2. DRE has control for climb only in SRE airspace.
3. DRW may climb through the ARW airspace.

Note: Pre-arranged coordination may be applied in the Final Radar delegated airspace only when Final is combined to Arrival.

4. Apply approved radar separation with Arrival or Satellite traffic by displaying the associated Full Data Block (position symbol, Mode C readout, and Heavy Jet/B757 information).

Note: The Departure Radar Positions are not required to continuously display "Full Data Blocks" associated with aircraft under the jurisdiction of Arrival or Satellite Control Position.

5. Do not apply prearranged coordination procedures when either STARS and/or Mode S are inoperative.
6. Do not use prearranged coordination procedures if the use of the procedure is impracticable or questionable due to traffic.

NOTE: Any radar position providing services to a non-transponder equipped aircraft must place a STARS generated Full Data Block on that target.

C. EFSTS

Below is what the departure controller receives:

Heavy Jet will have a box around type aircraft, B757 will have an underline

Maintaining Visual Separation from the preceding departure

TTT1234	1561	KBNA	+HARME J42 GHATS+	VIS		
<u>H/B772/T</u>	P1200		KBNA BNA J42 GVE DPNT4			
187	410	A30	KPHL	31		

TTT1234	5541	BNA	BNA <u>EE3</u>	VIS		
C172/T	P1143					
214	VFR/55	A35			090	

Assigned Altitude other than altitude required by SOP

VFR aircraft that does not want VFR FF, requesting heading to the east.

Departure Runway

Assigned Heading

12-2. DEPARTURE RADAR WEST/EAST MUST:

- A. Not turn departures back towards the extended runway centerline without prior coordination with Local Control. Exceptions to this are:
1. DRE may turn turbojet departures east off of the runway 2C H015.
 2. While in a North configuration, DRW may turn turbojet KRSTA and GDOGG departures off runway 31 (H280) back towards the gates once noise abatement procedures have been satisfied.
- B. Not turn an aircraft when notified by the Tower. Tower will state "do not turn (ACID)" or "your control reference (ACID)..." indicating that subsequent departures **will be** assigned headings between that aircraft's assigned heading, route and/or assigned gate.
- C. Not turn/vector aircraft on mandatory headings for noise abatement until three miles from the departure end of the runway or at or above 3,600 MSL whichever occurs first.

CHAPTER 13. SATELLITE RADAR EAST

13-1. GENERAL POSITION RESPONSIBILITIES

Satellite Radar East (SRE) must:

- A. Prior to hand-off to Final Radar, establish arriving aircraft at or in descent to the following altitudes:
 - 1. IFR- 3,000'
 - 2. VFR – At or below 3,000'
- B. Sequence arriving aircraft to MQY IAW the MQY/BNA Letter of Agreement.
- C. Provide IFR and VFR services to all satellite airports within the satellite area of jurisdiction.
- D. Approve a change to the advisory frequency (CTAF) prior to departure, for aircraft departing satellite airports.
- E. Monitor the GCO and MQY lines for IFR clearances and releases off satellite airports within their area of jurisdiction.
- F. SRE has control for turns and descent on contact in DRE/ARE airspace.
- G. When SRE is combined to DRE all responsibilities transfer to DRE.
- H. BNA must advise ZME Area 5 (BWG/BNA/SYI) when SRE is opened and/or closed.
- I. BNA must advise MQY tower when SRE is opened and/or closed.

13-2. SRE CHECKLISTS

Both Opening and Closing Checklists can be found in Appendix 13.

CHAPTER 14. WEST / EAST RADAR ASSOCIATE (AD / DD)

14-1. WEST RADAR ASSOCIATE (AD) POSITION RESPONSIBILITIES

West Radar Associate (AD) must operate IAW FAA JO 7110.65 Chapter 2 Section 10- Team Position Responsibilities for Radar Associate shall:

- A. Monitor and operate frequency 124.55 when JWN FCT is closed.
- B. Monitor Departure Radar West position via the “DRW” monitor button on the ETVS.
- C. Issue clearances from secondary airports in Departure Radar West airspace using non-radar procedures as initial separation.
- D. Forward any PIREPs received to the appropriate intra-facility positions and to the WS/SI/SC for further dissemination.
- E. Inform the WS/SI/SC of any delays.
- F. Enter information on the SIA page of the IDS as directed by other TRACON positions of operation.
- G. Inform the SI immediately of any aircraft emergency initially received in the TRACON. Advise the SC when these emergencies might operationally impact the airport.
- H. Ensure that aircraft have checked on with weather at satellite airports and the flight strip has been marked IAW the local strip marking requirements.

14-2. EAST RADAR ASSOCIATE (DD) POSITION RESPONSIBILITIES

East Radar Associate (DD) must operate IAW FAA JO 7110.65 Chapter 2 Section 10- Team Position Responsibilities for Radar Associate shall:

- A. Monitor and operate frequency 121.7 when MQY FCT is closed.
- B. Monitor the Departure Radar East position via the “DRE” monitor button.
- C. Issue clearances from secondary airports in Departure Radar East and/or Satellite Radar East airspace using non-radar procedures as initial separation.

- D. Forward any PIREPs received to the appropriate intra-facility positions and to the WS/SI/SC for further dissemination.
- E. Inform the WS/SI/SC of any delays.
- F. Enter information on the SIA page of the IDS as directed by other TRACON positions of operation.
- G. Inform the SI immediately of any aircraft emergency initially received in the TRACON. Advise the SC when these emergencies might operationally impact the airport.
- H. Ensure that aircraft have checked on with the weather at satellite airports and the flight strip has been marked IAW the local strip marking requirements.

14-3. AD – DD CHECKLISTS

Both Opening and Closing Checklists can be found in Appendix 14.

CHAPTER 15. RADAR COORDINATOR AND DATA COORDINATOR

15-1. RADAR COORDINATOR (CI1)

- A. When the CI1 position is not staffed, the position is closed and not combined with any other position.
- B. Tower must be informed when the CI1 position is opened.
- C. Radar Coordinator (CI1) must operate IAW 7110.65 Chapter 2 Section 10 - Team Position Responsibilities for Radar Coordinator.
- D. Provide flow instructions. Use of traffic management tools such as speed control or downwind entry must be coordinated to the RADAR position(s) which will regulate the traffic to the final controller when Final Radar East/West is open. Establish the approach sequence between RADAR position(s) when FRE/W is not in use, and at other times deemed necessary.
- E. Notify WS/SI of emergencies, incidents, or unusual occurrences. CI1 should be the focal point for information regarding such situations.
- F. CI1 is not necessarily relegated to specific sectors, but rather is to facilitate the efficient operation of the TRACON as a whole.
- G. When West/East Radar Associate (AD/DD) position(s) is/are closed, CI1 may assist RADAR position(s) with inter-facility coordination.
- H. When Data Coordinator (CI2) is closed, CI1 shall assume the responsibilities of that position.

15-2. DATA COORDINATOR (CI2)

- A. Process Traffic Management Messages:
 - 1. Place a slant line in box# 13 of the flight progress strip of the affected satellite departure that requires a release from Memphis ARTCC.
 - 2. Disseminate the original traffic management message to the appropriate departure position and advise the TRACON OS/CIC.
 - 3. Relay to JWN and MQY any traffic management information that may delay aircraft.
- B. Report Outages to the WS/SI.
- C. Request and update flight plan information via:

1. FDIO.

2. ZME FD via 119 Line, dial 94.

D. Process flight plans that will remain within BNA approach control airspace.

E. Mark flight progress strips as depicted in SOP Chapter 9-4.

F. Post flight progress strips at the appropriate RADAR position.

G. Other Duties:

1. Amend flight plans when requested.

2. Disseminate AIRMETs/SIGMETs/PIREPS to each RADAR position and JWN.

3. Monitor the system status area to ensure weather information for BNA, JWN, and MQY is up to date and accurate.

4. Report PIREPs to WS/SI for AIS-R.

5. Update NIDS as necessary.

6. Collect all flight progress strips from each TRACON position hourly. Mark each bundle with correct Zulu date and time.

CHAPTER 16: RUNWAY CHANGES

16-1. DETERMINATION TO CHANGE RUNWAYS

The determination to change runways will be made by the SC. Once the determination has been made, the SI will be responsible for orchestrating the runway change.

Note: All coordination between the Tower and TRACON must be via a recorded line.

Note: Compliance with Opposite Direction Operation procedures (Chapter 18) is required during a runway change.

16-2 ROUTINE RUNWAY CHANGES

- A. A routine runway change occurs when traffic and/or weather conditions are such that the change can be made with little or no derogation in service.
- B. Departures are allowed to depart from the runway originally assigned without being taxied to another runway for departure.
- C. To complete this runway change, the following action is required:
 - 1. SC must advise the SI the identification of the last aircraft to depart, which departure runway it will use, and an estimated time of departure. Once this aircraft departs, no aircraft may depart BNA without a release from the SI. BNA Approach may utilize the new active runways after the subject aircraft has departed and has been radar identified.

Note: If weather conditions and configuration allow, departing runway 31 is a tool that may allow aircraft to continue to depart while the remaining arrivals land on the previously assigned configuration. Ensure appropriate coordination's are made.

- 2. SC must ensure all departures have received the appropriate runway change information.
- 3. SC must obtain automatic releases for the new runway configuration.
- 4. The SI must use the information in Paragraph 16-2 C1 to formulate a realistic decision for the last arrival to the runway previously used.
- 5. The SI must inform the SC and all appropriate TRACON positions of the last arrival for the runway previously used.
- 6. The SI must make all required automation configuration entries.

7. The SI must assist controllers to hand off or point out aircraft to the appropriate positions when airspace configurations change as a result of a runway change.
8. The SI must inform Memphis Center TMU of the runway change via NTML or ZME 119 line (72 or 77).
9. The SI and SC must ensure the Runway Change Checklist is complete. (See Appendix 2-7)

16-3 UNUSUAL RUNWAY CHANGES

- A. An unusual runway change occurs when weather conditions or a wind direction/velocity change mandates an immediate runway change.
- B. When the determination to change runways is made, the following must apply:
 1. All aircraft must be taxied to the new departure runways.

Note: If weather conditions and configuration allow, departing runway 31 is a tool that may allow aircraft to continue to depart while the remaining arrivals land on the previously assigned configuration. This may be especially useful in an unexpected change situation. Ensure appropriate coordination's are made.

2. Aircraft established on or approaching the final approach course must be advised of current wind direction/velocity and given the option to land or be re-sequenced to the new arrival runway.
3. SC must ensure all departures have received the appropriate runway change information.
4. SC must obtain automatic releases for the new runway configuration.
5. The SI must use the information from PIREPS, missed approach aircraft or requests from pilots nearing BNA to formulate a realistic decision for the last arrival to the runway previously used.
6. The SI must inform SC and all appropriate TRACON positions of the last arrival for the runway previously used.
7. The SI must make all required automation configuration entries.
8. The SI must assist controllers to hand off or point out aircraft to the appropriate positions when airspace configurations change as a result of a runway change.
9. The SI must inform Memphis Center TMU of the runway change.
10. The SI and SC must ensure the Runway Change Checklist is complete. (See Appendix 2-7)

CHAPTER 17. BNA STANDARDIZED RUNWAY OPERATIONS

The prescribed procedures provide a standard/normal way of operating but they are not appropriate for every situation or circumstance. In short-term situations where Standardized Runway Operations (SRO) will not effectively support a safe and efficient operation, the WS will determine the most appropriate plan/procedure. For long-term equipment outages or runway closures, the ATM/FACREP/LSC will develop supplemental procedures. See Appendix 17 for current BNA SRO.

Note: These operations do not apply during Nighttime Operations outlined in Order 7232.38-Appendix 2 or during CAT II and III Operations or to Group V aircraft, which must be handled IAW MNAA LOA.

CHAPTER 18: OPPOSITE DIRECTION OPERATIONS

18-1. GENERAL

Opposite direction operations are defined as IFR and/or VFR Operations conducted to the same or parallel runway where an aircraft is operating in a reciprocal direction (defined by FAA JO 7110.65 Chapter 1-2-2) of another aircraft arriving, departing, or conducting an approach. This includes but is not limited to Flight Checks, Emergencies, Runway Changes, and Medevac Aircraft.

- A. This Chapter applies to all aircraft, IFR or VFR.
- B. The WS/SI/SC in the initiating facility or area of specialization is responsible for making all verbal coordination required to accomplish an opposite direction arrival or departure as well as ensuring compliance with the 10 mile cutoff point. All coordination must be on a recorded line and must state “opposite direction.” Initial coordination must include call sign, aircraft type, and arrival or departure runway.

Note: If the operation is split between the TRACON and Tower, coordinate with WS/SI/SC at their respective location. If the opposite direction operation will be wholly contained within the same facility, the WS/SI/SC must perform the coordination between the two positions of operation.

- C. The cutoff point is defined by the 10nm range ring centered on BNA airport.
- D. When conducting an opposite direction circling maneuver, the aircraft is no longer considered an opposite direction operation when the arrival has commenced the circling maneuver.
- E. Traffic advisories must be given to both aircraft and must include the phrase “opposite direction”.
- F. An “opposite direction” strip must be utilized at the Local position. The letters “ODO” must be written on the flight progress strip at the TRACON position affected by the procedure. If the TRACON isn’t printing BNA arrival strips, a hand written strip with the aircraft call sign and “ODO” must be used.

18-2. PARALLEL RUNWAY OPPOSITE DIRECTION OPERATIONS

Opposite Direction Arrival / Departures:

- A. Apply all provisions stated in 18-1, GENERAL.
- B. Once the Tower requests an opposite direction departure from the TRACON, the TRACON must keep all arrivals at least 10 miles away from the airport until the Tower verbally advises the opposite direction departure is airborne and in the turn.

- C. Once the TRACON requests an opposite direction arrival from the Tower, any departing aircraft must be airborne and turned at least 15 degrees (while still applying the provisions of BNA7232.38 Noise Abatement) away from opposing traffic to avoid all conflicts prior to an opposing arrival reaching the 10 mile cutoff (unless an emergency exists).
- D. The TRACON must ensure the arrival remains outside the identified cutoff point (CP) until the departure diverges by at least 15 degrees from the reciprocal of the arrival's inbound track. If it appears that an arrival aircraft may cross the CP, prior to the CP the controller must issue control instructions to re-sequence the arrival. The TRACON controller must take action prior to the CP by issuing headings, and altitude changes (if needed) to maintain the integrity of the cutoff point as well as to maintain standard separation.
- E. If the Tower observes that the arrival is inside the CP and the departure has not begun its takeoff roll, the Tower must cancel the departure clearance and coordinate with the TRACON for a new sequence.
- F. If the above conditions are not met, action must be taken to ensure control instructions are issued to protect the integrity of the cut off points.
- G. The provisions of FAA JO 7110.65, Visual Separation, may only be applied AFTER ALL other steps in Parallel Runway opposite direction operations outlined above are adhered to.

18-3. SAME RUNWAY OPPOSITE DIRECTION OPERATIONS

A. Opposite Direction Arrival / Departures:

1. Apply all provisions stated in 18-1, GENERAL.
2. Once the Tower requests an opposite direction departure from the TRACON, the TRACON must keep all arrivals at least 10 miles away from the airport until the Tower verbally advises the opposite direction departure is airborne and in the turn.
3. Once the TRACON requests an opposite direction arrival from the Tower, any departing aircraft must be airborne and turned at least 45 degrees (while still applying the provisions of BNA7232.38 Noise Abatement) away from opposing traffic to avoid all conflicts prior to an opposing arrival reaching the 10 mile cutoff (unless an emergency exists).
4. The TRACON must ensure the arrival remains outside the identified cutoff point (CP) until the departure diverges by at least 45 degrees from the reciprocal of the arrival's inbound track. If it appears that an arrival aircraft may cross the CP, prior to the CP the controller must issue control instructions to re-sequence the arrival. The TRACON controller must take action prior to the CP by issuing headings, and altitude changes (if needed) to maintain the integrity of the cutoff point as well as to maintain standard separation.

5. If the Tower observes that the arrival is inside the CP and the departure has not passed the hold short line of the runway, the Tower must cancel the departure clearance, hold the aircraft short of the runway and coordinate with the TRACON for a new sequence.
6. If the above conditions are not met, action must be taken to ensure control instructions are issued to protect the integrity of the cut off points.
7. The provisions of FAA JO 7110.65, Visual Separation, may NOT be applied when conducting Same Runway opposite direction operations outlined above.

B. Opposite Direction Arrival / Arrival:

1. Apply all provisions stated in 18-1, GENERAL.
2. Any conforming arriving aircraft must have crossed the landing threshold prior to the TRACON allowing the opposite direction arrival to reach a 10 mile final. Additionally, the opposite direction arrival traffic must have crossed the landing threshold prior to the TRACON allowing any subsequent conforming arrival to reach a 10 mile final.
3. If the above conditions are not met, action must be taken to ensure control instructions are issued to protect the integrity of the cut off points.
4. The provisions of FAA JO 7110.65, Visual Separation, may NOT be applied when conducting Same Runway opposite direction operations outlined above.
5. The provisions above do not negate any wake turbulence requirements set forth in FAA JO 7110.65.

CHAPTER 19: AIRCRAFT DEICING

19-1. PROCEDURES

Deicing stations will be located as depicted in Appendix 19. After deicing, aircraft should be taxied to the appropriate departure runway by the most expeditious taxi route possible. Ensure that Memphis Center TMU is contacted early enough so TMU can better facilitate departure times for aircraft participating in the En-route Spacing Program (ESP), and Expected Departure Clearance Time (EDCT).

19-2. RESPONSIBILITIES

A. The SC will:

1. Advise the WS when notified by MNAA Operations of the implementation or termination of the MNAA aircraft-deicing plan.
2. Inform MNAA Operations (275-1612) of the "Departure Rate" that is in effect.
3. Inform MNAA Operations of any aircraft requesting a pre-departure contamination check. The information must include the aircraft location and registration (tail) number.

B. The WS will:

1. Advise Memphis ARTCC (ZME) Traffic Management Unit of the start times and stop times of the MNAA deicing plan.
2. Document start and stop times on Daily Log (7230-4).

C. Ground Control will:

1. Provide the most expeditious taxi route possible to the departure runway. The RUNWAY ASSIGNMENT provisions of BNA ATCT 7232.38, Informal Runway Use Program, does not apply during deicing procedures.
2. Inform the SC of any aircraft requesting a pre-departure contamination check. The information must include the aircraft location and registration (tail) number.

D. Clearance Delivery will:

1. Cut a new ATIS selecting "DEICE AND TMU DELAYS". This will broadcast the following, "All aircraft contact clearance delivery prior to push back for possible delay information."
2. Coordinate any TMU delays to the affected aircraft prior to deicing.

E. Local Control will apply NOISE ABATEMENT HEADING provisions BNA ATCT 7232.38, Informal Runway Use Program, but only if no delay will result.

CHAPTER 20: MIDNIGHT OPERATIONS

20-1. PURPOSE

There will be a minimum of two fully certified and current personnel assigned to the midnight shift. During midnight operations, when traffic permits, all functions may be consolidated for meals or breaks. Providing service to air traffic is first consideration. The WS must direct the transition and the midnight operation keeping this in mind.

20-2. DEFINITIONS

- A. Combined Functions (TRACAB): Two positions open in the TOWER. One position for Tower functions, one position for TRACON functions.
- B. Consolidated Functions: One position open in the TOWER consolidating both Tower and TRACON functions.
- C. Single Person Operations: This is any time there is only one CPC in the operation.

20-3. COMBINING FUNCTIONS (TRACAB)

- A. Functions may be combined in the Tower, i.e. TRACAB configuration, when traffic permits and is approved by the WS. This will normally occur after 2200L upon arrival of the midnight shift crew. While it is permissible to combine functions earlier in the evening, the safe provision of air traffic services is paramount and must be the first consideration when determining whether to conduct facility ATC operations in a TRACAB configuration.
- B. Ensure the combining and opening of the TRACON is logged on Facility Log (7230-4).
- C. TOWER: LC1 will take the GC, CD and WS positions.
- D. TRACON: When the TRACON function is combined to the Tower:
 - 1. Call ZME Flight Data (119 Line, dial 94) and have FDIO printer routed to the Tower. Strip request all other flight progress strips to the BNAT printer.
 - 2. TRACON positions will be configured at the GC position as appropriate and when traffic conditions permit. TRACON Radar functions may be combined to GC ONLY if two separate positions will be worked in the cab.

20-4. CONSOLIDATING FUNCTIONS

- A. Normal parameters to consolidate the Tower and TRACON functions will be from 0000L-0530L or 90 minutes after the start of the midnight shift (i.e. if midnight shift begins at midnight 0000L, positions will remain open until 0130L), whichever is later.
- B. If the Tower and TRACON are consolidated EARLIER than the above listed times or opened LATER than 0530L, notify the ATM so that it can be reported up to the District Manager and make a log entry on Facility Log (7230-4) along with the reason for operating outside the set times.
- C. TOWER: LC1 will take the GC, CD, WS and TRACON positions as appropriate and when traffic conditions permit.
- D. TRACON: If the TRACON function is consolidated to the Tower:
 - 1. Call ZME Flight Data (119 Line, dial 94) and have FDIO printer routed to the Tower. Strip request all other flight progress strips to the BNAT printer.
 - 2. Combine all TRACON Radar functions to LC position as appropriate and when traffic conditions permit.

20-5. SINGLE PERSON MIDNIGHT OPERATIONS

- A. Single Person Midnight Operation (SPMO) procedures have been created in order to ensure that a receiving controller is prepared to accept an aircraft. These procedures require that coordination between facilities/operational areas be accomplished either manually via landline, or positively acknowledged via automation (for example, acceptance of the hand-off via keystroke entry.)
 - 1. SPMO procedures apply between the hours of 0000L – 0500L, if:
 - a. Only one ATCS is working in the BNA air traffic operation – then SPMO procedures must be accomplished with ZME.
 - b. Only one ATCS is working in each operational area – then SPMO procedures must be accomplished between the TRACON and the Tower Cab.
 - 2. If SPMO procedures are required, BNA ATCS must initiate or receive handoffs manually, either by keystroke or via verbal communication on a landline.

NOTE: SPMO procedures can be suspended during periods of increased traffic. Examples include, but are not limited to:

- ***Late night SWAP route events.***

- *Military movement/exercises.*
- *Multiple arrivals/departures in a short period of time*

3. WS must make entries in the Facility Log (7230-4), noting the start and end of SPMO procedures.

B. During SPMO procedures, if there is no response from the facility/operational area with which coordination is attempted, immediate action must be taken to determine the status of the unresponsive controller and begin appropriate notification.

1. Contact the Domestic Even Network (DEN) to report “lost communications”.

2. Make an entry on the Facility Log (7230-4).

C. If an emergency arises and there is only one ATCS remaining in the facility to work the midnight shift, ATC Alert must be declared and appropriate procedures implemented. If that ATCS is unable to work or requires a brief physiological break, ATC Zero must be declared and appropriate procedures implemented. When/where possible, ATCS should attempt to initiate the physiological break during periods of low traffic volume.

20-6. WATCH SUPERVISOR (WS)

A. The WS on the affected shifts will indicate the transfer on the Facility Log (7230-4).

B. The following WS determinations must be made:

1. If traffic will permit the consolidation.
2. If the RADAR and other Automation presentations are adequate.
3. The time of consolidation.
4. If equipment capabilities and limitations will be adequate.

C. Transfer control of the ASR-9/Mode S to the Tower.

D. The following actions will be completed to affect the transfer of control:

1. Advise all appropriate Memphis Center sectors of the transfer and coordinate any other information that will affect the operation.
2. Coordinate the final change over with the Cab, using the Position Relief Checklist, and transfer the control of traffic to the Cab.
3. Sign off electronic log in Cru-ART.

NOTE: All coordination with the TRACON must be via a recorded line.

CHAPTER 21: UNUSUAL PROCEDURES

SECTION 1 – OPERATIONAL CONTINGENCY PLAN

21-1-1. APPLICATION

Operational Contingency Plan (OCP) is a pre-coordinated plan containing operational and administrative instructions and procedures for Impacted and Support Facilities. It guides the OCP network when an Impacted Facility experiences a degradation or loss of ability to provide published air traffic services. It also contains procedures for continuity of published air traffic services through Supporting Facilities.

21-1-2. PROCEDURES

If implementation of OCP becomes necessary, follow guidelines outlined in OCP. The OCP binders can be found in the Tower, TRACON, TRACON “Go Bag”, and the Library, and an electronic copy located in the BNA AT Ops Share – Contingency Plans.

SECTION 2 – NON-RADAR APPLICATION

In the event that Memphis Center cannot provide services as outlined in ATC Zero of the ACT2 Facility Contingency Plan, Nashville TRACON will transition to non-radar procedures IAW the Memphis Center Letter of Agreement.

SECTION 3 - EMERGENCY TRACAB OPERATIONS

Emergency TRACAB Operations are intended to be used during emergency situations when normal ATC services cannot be provided or are not required due to extreme reductions in service demand. Such circumstances may include, but are not limited to, significantly reduced operational staffing, significantly reduced traffic volume and complexity, restricted or prohibited access to the TRACON, etc. In all cases, the safe provision of air traffic services is paramount and must be the first consideration when determining whether to conduct facility ATC operations in a TRACAB configuration.

21-3-1. APPLICATION

Emergency TRACAB Operations involve combining/configuring air traffic functions in the Tower Cab outside of normal midnight shift operations periods. At least two positions must be open in the TOWER. One position for Tower Cab functions, one position for TRACON functions. A facility-rated Supervisor (OSIC) or facility-rated Controller-in-Charge (CIC) must be present in the Tower Cab during any TRACAB operations.

21-3-2. PROCEDURES

During emergency situations, RADAR functions may be combined/configured in the Tower Cab to create a TRACAB operation. The WS must review the circumstances and determine whether TRACAB operations are warranted and/or viable. The ATM or OM must be notified prior to initiating TRACAB operations outside of normal midnight shift operations hours or other periods identified in the SOP (e.g., Saturday evenings after 2200L). When the circumstances that compelled emergency TRACAB operations no longer exist, the facility should resume a normal (separate TRACON and TOWER) configuration.

A. WATCH SUPERVISOR (WS) DUTIES AND REQUIREMENTS.

1. WS/SI must utilize the opening/closing TRACON checklist and ensure the combining and de-combining of the TRACON is logged on FAA Form 7230-4., Facility Log.
2. At a minimum, the following determinations must be made by the WS:
 - a. If circumstances (traffic volume/complexity, staffing, etc.) allow and/or warrant TRACAB operations. ATM/OM must provide concurrence with this determination and upwardly report to the District General Manager (see FAA JO 7210.3 2-6-12).
 - b. If RADAR and other equipment functionality (e.g., communications, automation, display presentations, etc.) is adequate to support TRACAB operations.
 - c. Traffic situations that need to be resolved, coordination that must be completed, and other requirements that must be met before TRACAB operations are initiated.
 - d. The time TRACAB operations will begin.
3. The following actions must occur to effect the transfer to TRACAB operations:
 - a. Advise ZME OMIC and impacted ZME sectors of the transition to TRACAB operations and coordinate any required information.
 - b. Call ZME Flight Data (119 Line, dial 94) and request the FDIO printer be routed to the Tower Cab. Strip Request all other flight progress strips to the BNAT printer.

- c. Coordinate formal transition from TRACON to TRACAB operations with the Tower Cab, and transfer control of air traffic using the Position Relief Checklist.
- d. Forward phones and transfer control of the ASR-9/Mode S to the Tower Cab.
- e. Make entry in FAA Form 7230-4 Facility Log (e.g., TRACAB operations commenced at XXXXz).
- f. Sign off electronic log in Cru-ART.

Note: All coordination with the TRACON MUST be via a recorded line.

- 4. The TRACAB WS must be responsible for accomplishing both the WS and Tower Cab watch/shift checklists, and for making appropriate entries (e.g., WCLC) in FAA Form 7230-4 Facility Log.
- B. During emergency TRACAB operations, unless available resources do not permit, the WS is expected to maintain at least two (2) positions open in the Tower Cab. The baseline configuration should be:
 - 1. TOWER: LC1/LC2, GC and FD/CD will be combined/configured at LC1.
 - 2. TRACON: All TRACON positions will be combined/configured at GC.
 - 3. A stand-alone SC or CC2 or FD/CD, as appropriate, should be assigned whenever possible in order to ensure the highest level of safety in the non-standard configuration.
 - 4. Watch Supervisor (WS) should be assigned to the position with the least workload and/or complexity. Personnel assigned WS must be OSIC or facility-rated CIC.
- C. When Emergency TRACAB operations are anticipated, a facility-rated CIC will be designated on the basic watch schedule for the shift unless an OSIC is available for watch supervision. This must be accomplished according to current orders and directives.
- D. When in the TRACAB configuration, WS should proactively review and, when necessary, mitigate excessive traffic volume and/or workload. Mitigation examples include, but are not limited to: reducing additional services to aircraft, adjusting internal departure rates, coordinating with ZME for fix balancing, etc., and when required, Traffic Management Initiatives (TMIs).

Note: WS/SI/SC must declare ATC Alert, if appropriate, due to staffing trigger, and complete the staffing trigger form with notifications prior to requesting a TMI.

CHAPTER 22: STANDARD TERMINAL AUTOMATION REPLACEMENT SYSTEM (STARS)

SECTION 1 -- SYSTEM PERFORMANCE AND DATA RETENTION

22-1-1. AIR TRAFFIC RESPONSIBILITIES

The Air Traffic WS is responsible for assuring that the overall STARS performance is acceptable for air traffic control purposes.

22-1-2. TECHNICAL OPERATIONS RESPONSIBILITIES

The Technical Operations personnel assigned automation duties are responsible for monitoring system performance to detect current and potential problem areas.

SECTION 2 – CONTROLLER RESPONSIBILITIES

22-2-1. GENERAL

- A. Each controller is responsible for determining that the display is acceptable for air traffic purposes. All controllers must **SIGN-ON** a TCW/TDW as they assume the position of operation. The format for signing on the TCW/TDW is in Appendix 22-2. Local Control(s) must ensure that automatic acquisition of departing aircraft is accomplished. If any position of operation is unable to display, maintain, update or modify active tracks under its control, other positions of operation must be promptly notified.

Note: All PREF sets must have the required items as shown in Appendix 21 for standardization of the System Status Area and displayed at all times.

- B. The “Quick Look” function should be used by TRACON positions of operation on the basis of need. The Local Control position must, based on the runway in use, “Quick Look” the position(s) of operation that control arriving aircraft. Local Control must be informed by the controlling position anytime arriving aircraft are being controlled from positions other than arrival positions.
- C. Fixes usable in “Clearance Delivery/Flight Data” entries are defined in Appendix 22-1.
- D. Any defect or abnormality detected in any automated device must be reported to Technical Operations.
- E. Whenever the STARS equipment is initiated while air traffic operations are confined to the Tower, it is the responsibility of controller personnel to insure proper system initialization. This includes setting the altimeter and configuration via keyboard

entry. The altimeter is now automatically updated. When Memphis Center is operational with NAS program, NAS/STARS interface must be established by making the FDIO entry "RB BBB".

1. To turn on automatic altimeter for BNA: F7, A, BNA, SPACE, A, ENTER
2. Enter the altimeter setting manually: F7, S altimeter, ENTER

NOTE: Changing altimeter manually disables the automatic altimeter updates.

- F. Control flights assigned ATA/DTA as specified in Appendix 22-2.
- G. The STARS gives the controller the capability of performing Automated Point-outs in lieu of using the landline for pointing out aircraft. Automated point-outs may be used in lieu of verbal coordination. See Appendix 22-2 for the format to accomplish automated point-outs.

22-2-2. TRACKING

- A. To insure maintenance of identity, Full Data Block (FDB) must display the symbol of the radar position controlling the aircraft. This provision does not apply to the displays for flights transferred to Tower control from the radar positions. Flights on a "C" symbol not processed by the normal STARS/NAS hand-off system must be modified to the controlling position's symbol.
- B. Position symbols must not be used in lieu of the primary or beacon radar targets to effect the separation of aircraft.
- C. To attain maximum benefit from NAS/STARS interface, do not generate a track on any traffic that should be transferred automatically until assuming control of the aircraft.
- D. Authorized abbreviations for use in Field 2 (scratch pad 1 and 2) of the full data block are listed in Appendix 22-1.

22-2-3. BEACON CODE USAGE

- A. During NAS/STARS interface, the only discrete beacon codes available for assignment to aircraft must be those printed on the FDIO strip or those assigned upon request from the STARS computer.
- B. There are special use codes used by local helicopter operators in the Nashville area. These codes can be found in appropriate Letters Of Agreement.

22-2-4. USE OF MANUALLY ENTERED ALTITUDE INFORMATION IN FIELD 2 AND FIELD 4 OF THE FDB

- A. Except for the entries in Chapter 9 or Appendix 22-1, indicating an aircraft climbing or descending, altitude information must not manually be entered in scratchpad 1 or 2 unless verified with the pilot in “level flight” at the displayed altitude. Prior to issuing a new altitude to the pilot, the manually entered altitude must be erased and coordination effected with all related positions.
- B. When one position is handing off an aircraft to another position and the aircraft is not at an altitude as prescribed on the flight progress strip or in this Order, the altitude assigned must be entered in the **Assigned Altitude Scratch Pad of field #4**. See Chapter 9 or Appendix 22-1 for the format to enter the altitude in the scratch pad.

22-2-5. SYSTEM INFORMATION UPDATE

- A. The second line of the System Data Area contains two fields. The first field is a single alpha character and must be used for the current ATIS information. The second field is defined as the General Systems Information area (GSI). Either 2, 20, 13, or 31 must be displayed in this area, indicative of the runway in use and either VA or ILS for the primary approach being advertised.
- B. The ATIS, GSI, and altimeter must be maintained by the position of operation specified in BNA 7999.1.

SECTION 3 – WATCH SUPERVISOR RESPONSIBILITIES

22-3-1. AIR TRAFFIC WATCH SUPERVISOR (WS)

The WS must act as the focal point for all corrective action effected in the STARS. This includes a determination of applicable recovery procedures, coordination with affected parties, follow-up action, and maintenance of appropriate records.

- A. The WS must ensure all configuration changes are properly initiated and completed.
- B. When combining or consolidating TRACON to the Tower ensure the appropriate configuration is selected.
- C. When opening the TRACON, select the desired configuration for the runway in use.

22-3-2. SWITCHING FROM FSL TO DSA AND RETURNING TO FSL

- A. When Full Service Level (FSL) becomes unavailable due to outage or maintenance, press and hold the F16 button, then press “D” to transition the TCW/TDW to Direct Sensor Access (DSA). When FSL is restored, the same key entry will bring STARS back to FSL mode. An alternate method is to select Mode then DSA was made, returns when the transition is made from DSA back to FSL.

Note: If Flight Plan tab list did not repopulate: enable ARTCC/STARS interface. In FDIO, enter RB, space, BBB, ENTER

- B. There is no ability to switch to DSA mode during STARS updates/software changes. Updates normally take less than 30 seconds. Whenever STARS has a software change/update, the STARS automatically will revert to the default configuration. Any aircraft previously tagged prior to update will need to be manually tagged and handed off after update. Startup items after update:
1. Select STARS configuration and position consolidation (if applicable).
 2. Enable ARTCC/STARS interface. In FDIO, enter **RB, space, BBB, ENTER**.
 3. Reenter PREFSETS.
 4. Reenter SSA information.

22-3-3. NATIONAL PROGRAM FUNCTION

The national STARS program incorporates many levels of user functions. Refer to the **STARS Quick Reference Cards** located in both the TRACON and Tower.

22-3-4. LOCAL MODIFICATIONS

Nashville local modifications incorporate many levels of user functions. Chapter 9 or Appendix 22-1 and 22-2 of this order list the various modifications and keyboard entries.

SECTION 4 – STARS COMPUTER TRAFFIC COUNT PROCEDURES

22-4-1. TABULATION STANDARDS

- A. The program automatically provides a count for:
1. IFR arrival, departures, and over-flights.

2. Class "C" airspace arrivals, departures, and over-flights.
3. Instrument Approaches
4. An IFR flight departing and landing at airports within Nashville airspace, 2 counts, one for the departure and one for the arrival (e.g. Nashville to Smyrna).

B. A count will NOT be registered for:

1. Any ACID with TTT as the first three characters
2. AT Coach generated targets
3. Any target without a data block
4. Periods when STARS is in DSA mode or out of service

22-4-2. COMPUTER COUNTING PROCEDURES

The computer counting system uses a combination of aircraft identification to obtain aircraft category (Air Carrier, Civil, etc.) and beacon code or flight status to determine type of operation (IFR arrival, Class C airspace, Airport, etc.) to formulate and register the correct count. All tracks started for test or demonstration purposes at any display must a TTT as the first three ACID characters, otherwise a count will be falsely registered. The types of operations are determined as follows:

- A. IFR DEPARTURES are counted upon auto acquisition or manual track start. The airport is determined through fix/pairs received via the ZME inter-facility message or keyboard input. If no fix/pairs are entered the status becomes that of the assigned position (e.g. ARE status = Arrival BNA airport).
- B. IFR ARRIVALS are counted through keyboard drop messages, or when dropping from the coast list three minutes after having entered the arrival auto drop zone. Airport determination is the same as for IFR departures.
- C. IFR OVER FLIGHTS are processed the same as IFR arrivals, except that the count occurs as soon as the flight enters the over flight auto drop area.
- D. CLASS "C" AIRSPACE OPERATIONS are recognized when the flight is squawking a Class "C" airspace code, or another code and the FDB contains a V or, it is an RDR VFR flight. Class "C" airspace flights are counted as:
 1. A departure if the track is initiated less than 3 miles from BNA
 2. An arrival if the track drops less than 3 miles from BNA

3. An over flight when the track is dropped, if it does not qualify under the conditions of an arrival or a departure.
- E. INSTRUMENT APPROACHES are counted when a keyboard entry is made to initiate the count. The entry is – F7, 2, C, *, E for enable/ I for inhibit, Enter. To indicate that the entry has been made and approaches are being added to the count system, and asterisk (*) appears between the time and altimeter in the Systems Data Area. As long as the asterisk remains in the System Data Area, a separate instrument approach count will be registered for each IFR arrival. The keyboard entry to stop counting approaches is the same as the entry to start counting approaches.

22-4-3. RESPONSIBILITIES

A. Local Control must:

1. Count all traffic remaining within the local traffic pattern on Tower frequency and enter in the Tower Ops program.
2. Prepare a flight progress strip for any arrival/departure that is provided Class “C” service that remains on the Tower frequency.

B. The TRACON radar positions must insure that a flight progress strip exists for all:

1. Aircraft on an IFR flight plan.
2. Class “C” airspace aircraft.
3. Aircraft practicing instrument approaches.

C. The WS is responsible for:

1. The entry to start and stop the counting of instrument approaches, as dictated by the reported weather at the Nashville airport.
2. Marking a blank strip with the date, count-hour, and placing them on the Watch Supervisor’s desk at the end of each hour. (*Example- 6/28/05 13-14 hr*).

D. The WS is responsible for ensuring that when the automated count is not available that a manual strip count must be recorded. Denote a manual count by dividing the column with a slant and placing the amount in the lower half of the column.

E. The Support Specialist assigned to Automation is responsible for:

1. Monitoring the Traffic Count Program for potential improvements.

2. Extracting and tabulating daily totals through an automated process and posting same.
3. Preparing the Airport Operations and Instrument Approach Monthly Summary in accordance with procedures in FAAO 7210.3.
4. Calculating the facility traffic density factor each month.

SECTION 5 -- STARS OPERATIONAL MODES

22-5-1. OPERATIONAL MODES

A. Full Service STARS is equipped with two operating modes:

1. Full Service Level (FSL)
2. Direct Sensor Access (DSA)

Note: DSA only available if ASR-9 primary radar is operational.

B. Radar Sites available for STARS

1. Nashville ASR-9 – BNA
2. Joelton Long Range Radar – QOJ

C. FUSION.

1. Combines data acquired from the BNA ASR-9, QOJ LRR and ADS-B to produce one combined radar display return.
2. During a single radar site outage, it is acceptable to use fusion, utilizing the remaining operational radar site and ADS-B.
3. While in fusion mode (regardless of distance from operational radar site), 3NM of separation is acceptable unless the data block displays “ISR”, then 5NM separation is required.

22-5-2. OPERATIONAL MODE TRANSITION

A. The WS is responsible for making the transition decision. Transitions to/from normal mode of operation require approval from the WS. Normal mode of operation is

defined as Fused mode (utilizing all sites: BNA, QOJ and ADS), Full Service Level STARS

- B. The following procedures must be utilized during mode transition to/from normal mode.
 - 1. BNA ASR-9 radar must be operational to transition to DSA mode.
 - 2. Personnel must advise the WS when circumstances merit a mode transition, and provide as much description as practical.
 - 3. If it is determined to transition from normal mode, the WS must advise all personnel to transition to the alternate mode.
 - 4. The WS must ensure all effected adjacent facilities are advised.
 - 5. The WS must collaborate with TMU and determine the appropriate flow control initiative(s).
 - 6. A descriptive entry must be made in the Facility Log (7230-4) whenever a mode transition takes place.

22-5-3. STARS DSA OPERATION

- A. The Tower will:
 - 1. Issue departing aircraft the ZME ERAM assigned discrete beacon code.
 - 2. Coordinate with TRACON for releases of departure aircraft.
 - 3. Input Departure Messages (DM) into the FDIO.
- B. TRACON will provide Tower with the arrival sequence. Coordination will at a minimum include the ACID, Discrete Beacon Code, Aircraft Type, and landing runway.
- C. When operating in DSA mode, check the following items and update where necessary:
 - 1. Altimeter Setting. Auto update of altimeter is not available in DSA mode. See appendix 22 on how to manually update the altimeter.
 - 2. Display all Beacon Codes. Press BCNR key (upper left-most function key).
 - 3. Correlate tracks and flight progress strips

4. Scan for and resolve any potential conflicts.

22-5-4. DSA MODE

- A. DSA mode is scope specific. If one radarscope is placed in DSA mode, only that specific scope will be operating in DSA mode – the entire facility will not automatically transition to DSA mode.
- B. Any information entered on a DSA mode enabled radar scope will not be displayed on other radar scopes, whether they are operating in FSL or DSA modes, and vice versa.
- C. MSAW and Conflict Alerts are not available.
- D. The emergency codes (7700, 7600, and 7500) are all automatically monitored in DSA.
- E. Data block scratch pads are not available. Information must be verbally coordinated in lieu of scratch pad entries.
- F. The Flight Plan processing and the automatic handoff features are not available in DSA mode. Manual handoffs must be performed, both inter and intra- facility.

NOTE: Aircraft on non-discrete beacon codes (i.e. 1200 code) cannot be tagged.

22-5-5. RETURN TO FSL MODE

- A. Press and hold the F16 button then press “D” to transition the TCW/TDW to FSL mode. An alternate method is to select Mode then FSL from the DCB menu.
- B. Check the following items and update where necessary:
 1. Altimeter setting. Verify altimeter is in Auto mode. See 22-2-1 E on how to change altimeter setting to auto update.
 2. Enter STARS configuration
 3. Restore flight plan information (in FDIO type RB BBB enter)
- C. Check that all targets are on unique codes. In DSA, more than one aircraft may have the same discrete code.
- D. Scan for and resolve any potential conflicts.

E. Advise all affected positions.

22-5-6. RADAR SELECTION PROCEDURES

- A. The WS has decision authority for all radar selection decisions. The use of any radar site other than Fused mode (utilizes all sites: BNA, QOJ and ADS) requires approval from the WS.
- B. The following procedures must be utilized when selecting radar sites.
 - 1. Personnel must advise the WS when circumstances merit use of an alternate radar site, and provide as much description as practical.
 - 2. If it is determined that an alternative radar site is operationally advantageous, the WS must advise the affected sector(s) to select the alternate site.
 - 3. The WS must ensure all affected adjacent facilities are advised.
 - 4. The WS must collaborate with TMU and determine if flow control initiative(s) are required.
 - 5. If it is determined the reason for selecting alternative radar sites is due to the derogation of the BNA ASR-9, Tech Ops must be advised through AOCC and an entry must be made in Facility Log (7230-4).

Note: Multi-Sensor Mode MUST not be used.

CHAPTER 23: CAT II/III

SECTION 1 -- Category II/III Operational Responsibilities

23-1-1. RESPONSIBILITIES

The SC is responsible for:

- A. Ensuring that all required components are operational prior to commencing with CAT II/III Approaches. When in doubt of outage impact on CAT II/III Approaches, contact AOCC for clarification.
- B. Ensuring that failure of FAA CAT II/III equipment monitored in the Tower is reported to the WS and any Airport Lighting failure is reported to MNAA Operations. The WS will notify AOCC, who will advise of CAT II/III impact.
- C. Suspending CAT II/III operations when advised by AOCC. AOCC issues all appropriate NOTAMs pertaining to FAA equipment.

23-1-2. GENERAL

The pilots are responsible for compliance with minima prescribed for their class of operation in appropriate FAR and/or operation specifications. A pilot's request to exercise CAT II/III authority may be honored even when the weather is above the approach minimums. In these cases, CAT II/III navigational equipment will be operational and ILS critical area protection provided or the pilot will be advised that signal protection is not being provided.

23-1-3. CAT II/III OPERATIONS

When the RVR decreases to at or below 2,000 feet, the WS shall make an entry indicating "CAT II/III operations are being conducted" in the Facility Operations Log (Dash 4) and the SC shall notify the WS and:

- A. Runway 2L:
 - 1. Make sure that the Runway Edge, Centerline, and Touchdown lights are on and there are no red alarm lights on the Airfield Lighting Panel. Red alarm lights indicate a loss of more than 10% of the lights and therefore CAT II/III cannot commence. EXCEPTION: The generator light illuminates in red. This is not an alarm.

2. Turn on the Airfield Lighting Generator. Select the POWER PAGE button on the Airfield Lighting Panel. Turn on the West Vault Generator for Runway 2L. Make sure that the GENERATOR ON LINE light comes on. The generator light illuminates in red. This is not an alarm.
3. Turn on the ALS Lights to Step 5 and then turn on the ALS Generator.
4. Check the ILS Monitor panel and make sure that the CAT II/III light is a steady green. A steady green light is required to commence CAT II/III approaches. If the light changes to a blinking yellow light, you may continue CAT II/III approaches but you cannot start CAT II/III with a blinking yellow light.

B. Runway 2R:

1. Make sure that the Runway Edge, Centerline, and Touchdown lights are on and there are no red alarm lights on the Airfield Lighting Panel. Red alarm lights indicate a loss of more than 10% of the lights and therefore CAT II/III cannot commence. EXCEPTION: The generator light illuminates in red. This is not an alarm.
2. Turn on the Airfield Lighting Generator. Select the POWER PAGE button on the Airfield Lighting Panel. Turn on the East Vault Generator for Runway 2R. Make sure that the GENERATOR ON LINE light comes on. The generator light illuminates in red. This is not an alarm.
3. At the ALS Remote Control Panel (RCP) in the Air Traffic Control Cab, select Brightness Intensity 5. Wait at least 3 minutes for the monitor to become active, then visually check the ALS monitor status as displayed on the RCP. Verify a satisfactory status indication. For any status other than satisfactory, notify the WS. The WS will notify AOCC, who will advise of CAT II/III impact.
4. Select desired intensity.

Note: It is recommended to verify operation via PIREPs on an occasional basis during each eight hour period, but not required.

Note: Maintaining continuous operations in Brightness Level 5 will require regular attention because of a timeout feature which automatically downgrades the system to Brightness Level 4 after 15 minutes of operation.

5. After 8 hours of ALS operation, repeat (C) to verify ALS operation.

SECTION 2 – Category II/III NOTAM Requirements

23-2-1 NOTAM Requirements

- A. When facilities do not meet the functional requirements as advised by AOCC, a NOTAM must be issued. The AOCC is responsible for issuing the NOTAM.
 - 1. If any marker beacon fails, pilots must be advised and appropriate NOTAMs issued.
 - 2. If CAT II and/or CAT III operations cannot commence or continue, the NOTAM must specify, **"BNA RUNWAY __ Category II/III operations are not authorized"**.
 - 3. If a required CAT II/III component fails which would have allowed operations to continue with increased minimums as advised by AOCC, the NOTAM must state **"BNA (Component) OTS increase CAT __ minimums to (Appropriate minimums)."**
 - 4. NOTAM information must be indicated on Facility Log (7230-4) as appropriate.
- C. Facility Log (7230-4) Entries: Log entries must be made indicating all time periods when CAT II and/or CAT III minimums are being used. Entries may be noted as intermittent when weather conditions are fluctuating above and below appropriate minimum.

CHAPTER 24: OPERATIONAL RISK MANAGEMENT (ORM)

24-1. OPERATIONAL RISK MANAGEMENT PLAN (ORMP) – A formal document for review and approval in collaboration with Air Traffic and Technical Operations (Tech Ops) to be used in conjunction with local procedures to support the completion of formal ORM maintenance activities and projects that may affect the National Airspace System (NAS).

24-2. PRINCIPLES OF ORM

A. SITUATIONAL AWARENESS - Understand the current state and dynamics of the operation and remain vigilant for future changes and developments. Considerations include:

1. Peak and off-peak traffic periods.
2. Weather conditions.
3. Known concurrent activities that could affect, or be affected by this activity. Example: VIP movement, airshows, other outages, etc.
4. Additional outages in your facility or adjacent facility.
5. Current staffing/operational oversight.
6. Other communication/surveillance equipment available as an alternate means of providing air traffic services.

B. PLAN ACTIONS – The method and resources needed to accomplish the activity. Considerations include:

1. Review break rotations/staffing plan to ensure positions are staffed accordingly.
2. Review applicable (e.g., FAA Order JO 1900.47) Air Traffic Control Operational Contingency Plans.
3. Brief affected staff prior to outages of the credible risks and potential impacts including worst-case scenarios and alternate procedures.
4. Identify the Tech Ops Point of Contact (POC) if immediate contact is needed.
5. Test back-up equipment before releasing the primary equipment to be worked on (where applicable).

C. IDENTIFY OPERATIONAL CONSEQUENCES – Identify the NAS systems and air traffic stakeholders that will, or could potentially be affected during the execution of the plan. Considerations include:

1. Credible risks and potential impacts including worst-case scenarios that could affect Air Traffic's ability to provide service.
2. Affected facilities, sectors/areas, positions, or other stakeholders participating in, or potentially impacted by the activity.
3. Adverse effects to ATC personnel safety.

D. COMMUNICATE – An ongoing exchange of information between Tech Ops and Air Traffic personnel is essential for the review of the potential operational consequences and development of mitigation strategies. The information must be received, understood, and, in some cases, approved. Considerations include:

1. Identified credible risks and potential impacts including worst-case scenarios.
2. Mitigation Strategies.
 - a. Include using the back-up equipment/systems, alternate channels, etc.
 - b. Confirm proper operation of support equipment, standby equipment and/or backup systems prior to conducting the scheduled activity.
 - c. Confirm Tech Ops and Air Traffic are prepared to implement their mitigation strategies.
3. Notify Tech Ops immediately of any circumstances that may affect the procedure/task, e.g., change in operational hours, unusual circumstances, or operational configurations.
4. "Take-5", if needed (to gain more information or reassess approval).
5. Discuss and/or document effectiveness of plan for future reference or training.

E. COORDINATE – Considerations include:

1. Coordinating the activity with the appropriate adjacent facilities.
2. Additional coordination and notification requirements should there be a change to planned activity.
3. Notify Regional Operations Center (ROC), Domestic Events Network (DEN), or facility management (when applicable).
4. Verify the equipment status and configuration upon completion of the activity.

5. Ensuring that Out for Maintenance (OFM) and Return to Service (RTS) are recorded on FAA Form 7230-4, Daily Record of Facility Operations.

24-3. PROCESS

BNA ATCT/TRACON Air Traffic Manager (ATM) or designee must:

- A. Collaborate with BNA Tech Ops System Support Center Manager (SSCM) or designee during any projected planned maintenance tasks that may impact Air Traffic Control.
- B. Ensure affected Air Traffic stakeholders or appropriate Subject Matter Experts (SMEs) are notified of planning meetings.
- C. Review all Project Risk Plans (PRP) received from Tech Ops. (PRP is a living document that promotes coordination and communication and reduces the risk to the NAS associated with project implementation.)
- D. Forward concur or non-concur via the notification email or directly through the Corporate Work Plan Portal link provided in the email.

24-4. PROCEDURE: ORMP REQUIRED

- A. ORMP will be required for any Preventative Maintenance (PM) designated by the handbook OPR as a formal ORM maintenance activity, or any maintenance task identified jointly by SSCM and ATM.
- B. Facility Air Traffic Management in collaboration with NATCA will:
 1. Identify persons or positions authorized to review and/or approve ORMPs for the facility.
 - a. Approver – Support Manager, Operations Manager, Air Traffic Manager or designee
 - b. Point of Contact (PCO)/Reviewer – Support Manager, Support Specialist for Planning and Requirements, Operation Supervisor, or designated SME
 - c. Team Members – NATCA Rep (or designee) and additional facility personnel can be chosen by any team member.
 2. Communication procedures to ensure team members are notified will be via email, other electronic means, or verbal communication of their team participation responsibilities.
 3. Add team members for informational and increased situational awareness purposes and should address any concerns through the Point of Contact (POC)/reviewer or approver.

C. Air Traffic Team Members consist of the POC/Reviewer and Approver.

D. Air Traffic Team Members must:

1. Consist of a Union representative.
2. Add additional team members as necessary.
3. Participate in ORMP meetings.
4. Review and comment on the ORMP.
5. Assess operational risks, identify any conflicting activities, and propose mitigations.
6. Maintain situational awareness until completion of the activity.
7. Contact the Air Traffic POC if the situation changes or the ORMP requires reassessment.

E. The Air Traffic POC/Reviewer is responsible for coordination of the ORMP meeting with all affected air traffic stakeholders.

1. Reviews the composition of the ORMP team and ensures the appropriate Air Traffic Team Members and/or Air Traffic Approver have been assigned. When more than one facility is affected, ORMPs may require multiple reviewers or approvers.
2. Add team members as appropriate.
3. Participates in ORMP meetings.
4. Identifies any conflicting activities.
5. Ensures the completeness and feasibility of executing the ORMP, (shares responsibility with the Air Traffic Approver).
6. When the ORMP has been submitted for Air Traffic review, completes the Air Traffic mitigation plan element with the Air Traffic Team participation and submits the ORMP for approval. The System Support Center (SSC) Manager(s) will submit the plan to the Air Traffic and Tech Ops approvers.
7. Ensures the affected Air Traffic personnel are briefed and prepared to implement mitigations prior to commencing work.

F. The Air Traffic and Tech Ops Approvers are responsible for the final review of the ORMP. The Approvers:

1. Ensure the completeness and feasibility of executing the ORMP (shared responsibility with the Air Traffic POC/reviewer).
2. Approve the ORMP or select the Take 5 button with comments for additional consideration or follow-up.
3. Change role assignments or team members as necessary.
4. Identify any conflicting activities.
5. Ensure the High Visibility Event flag is set when it meets the appropriate definition outlined below.

24-5. PROCEDURE: ORMP NOT REQUIRED

- A. Current day-to-day coordination and cooperation between Air Traffic and Tech Ops for normal/local equipment outages fall under the principles of ORM. All Planned outages and maintenance activities shall utilize the principles of ORM and require personnel to review the ORM checklist. Checklist available below.
- B. Facility Watch Supervisor (WS) position is responsible for information sharing and awareness regarding planned/scheduled maintenance, unscheduled maintenance, outages, and related operational expectations, etc. WS will ensure appropriate coordination occurs with affected parties including, but not limited to: Air Traffic Manager, Operations Manager, Support Manager, Tech Ops Managers or System Operations Center (SOC) personnel, Staff Office/Support personnel (if needed), NATCA Rep (if needed), Supervisors, and Traffic Management Coordinator (TMC or STMC).

24-6. ORM CHECKLIST

PRINCIPLES	CONSIDER THIS
1. Situational Awareness Understanding the current state and dynamics of the operation and remaining vigilant for future changes and developments.	- Peak and off-peak traffic periods. - Weather conditions - Known concurrent activities that could impact, or be impacted by this activity <i>Example: VIP movement, airshows, other outages, etc.</i> - Additional outages in your facility or an adjacent facility - Current staffing/operational oversight - What other communication/ surveillance means are available as an alternate means of providing air traffic services
2. Plan Actions The method and resources needed to accomplish the activity.	- Review break rotation/staffing to ensure positions are staffed accordingly - Review applicable publications, policies and procedures i.e.- FAA Order JO 1900.47, Air Traffic Control Operational Contingency Plans - Brief staff on duty during outage of the credible risks and potential impacts including worst case scenarios and alternate procedures. - Identify the Tech Ops POC if immediate contact is needed. - Test back up equipment before releasing the primary equipment to be worked on (where applicable)
3. Identify Operational Consequences Identify the NAS Services and Air Traffic stakeholders that will, or could potentially be affected during the execution of the plan.	- Know the credible risks and potential impacts including worst-case scenarios that could affect Air Traffic's ability to provide services. - Affected facilities, sectors/ areas, positions, or other stakeholders participating in, or potentially impacted by the activity. - Determine if there are adverse effects to ATC personnel safety.
4. Communicate An ongoing exchange of information between Technical Operations and Air Traffic personnel to review the potential operational consequences and develop mitigation strategies. The information must be received, understood, and in some cases approved.	- Identified credible risks and potential impacts including worst-case scenarios. - Mitigation strategies - Included using the backup equipment/systems, alternate channels, etc. - Confirm proper operation of support equipment, standby equipment and/or backup systems prior to conducting scheduled activity. - Confirming Technical Operations and Air Traffic are prepared to implement their mitigation strategies - Notify Tech Ops immediately of any circumstances that may affect the procedure/task, i.e. change in operational hours/ unusual circumstances, operational configurations, etc. - Take-5, if needed (to gain more information or reassess approval). - Discuss and/or document effectiveness of plan for future reference or training.
5. Coordinate	- Coordinating the activity with the appropriate adjacent facilities, if necessary. - Additional coordination and notification requirements should there be a change to planned activity. - Notify ROC, Den or facility management (when applicable). - Verify the equipment operational status and configuration upon completion of the activity. - Record Out for Maintenance (OFM) and Return to Service (RTS) on the facility log (7210-4)

APPENDICES

APPENDIX 1: (RESERVED FOR FUTURE USE)

APPENDIX 2: WATCH SUPERVISION

(Unless noted, call AOCC for outages)

NOTE: Formatting for all checklists are set to the IDS format.

APPENDIX 2-1: TRACON OPENING CHECKLIST

TRACON Opening Checklist

- 1) Receive an “in charge” briefing utilizing the WS/SI/SC checklist and the Facility Log (7230-4).
- 2) Sign on to the Facility Log (7230-4) at the assumption of WS.
- 3) Verify the commercial phone is assigned at TRACON. (Select left or right arrow until CFWD Option then exit)
- 4) Verify control of Radar is in TRACON.
- 5) Verify Mode S is assigned to TRACON.
- 6) Switch Security Gate Controls to OFF. (only if ADMIN office is open)
- 7) Before 0700L: Notify ZME TMU via NTML or 119 line (dial 72 or 77) of the runway configuration and arrival acceptance rate. Notify the adjacent ZME sectors of runway configuration and type of approach.
- 8) Add entry to Facility Log (7230-4), “TRACON Open”
- 9) Call ZME for Printers

APPENDIX 2-2: TRACON CLOSING CHECKLIST

TRACON Closing Checklist

- 1) Call ZME for printers
- 2) Call Tower to give a briefing utilizing the WS/SI/SC Position Relief Briefing Checklist and Facility Log (7230-4).
- 3) Enter Applicable STARS Configuration
- 4) Review the Facility Log (7230-4) for completeness, accuracy, and correct errors.
 - a) Add entry to facility Log “TRACON combined to Tower” if the TRACON and Tower functions will be worked by 2 controllers
 - b) Add Entry to Facility Log “TRACON Consolidated to Tower” if both functions will be worked by one controller
- 5) Ensure the Daily Training Tracking Spreadsheet has been completed.
- 6) Forward the commercial telephone to the Tower. Select the Left or Right Arrow until CFWD Option is visible, then select it. 4950 should be displayed on top of the screen, if so, select “done” then exit. If not, press the Left arrow until screen doesn’t display any number, then type 4950, “done”, and exit.
- 7) Switch ASR Radar Panel to Tower
- 8) Switch Mode S to Tower
- 9) Switch Security Gate Controls to Tower

APPENDIX 2-3: 0800 LOCAL WATCH CHECKLIST

0800 Local Watch Checklist

- 1) Verify Facility Log (7230-4) shows TRACON Open
- 2) Compare DASI altimeter readings with the displayed altimeter setting of ASOS. If correction factor exceeds .02, remove from service and use ASOS altimeter.
- 3) Verify ITWS/LLWAS RWY selection matches the correct runway operation for the shift
- 4) Review TAF and NOTAMs on appropriate website, update, and verify all NOTAMs are in the IDS
- 5) Make a visual check of the RVR, LLWAS Ribbon Display, and the WME data in the IDS
- 6) Check weather and forecasted weather to see if PIREPS are required per FAA JO 7110.65. If PIREPS are required, click the SOLICIT PIREPs button, enter PIREPs on the main page of the IDS, enter PIREPs into the AISR or send to ZME FD as required.
- 7) Check CEDAR Calendar for daily events
- 8) Certify previous days T&A
- 9) Coordinate with all positions for frequencies to be on Mains odd days/Stand-By even days

- 10) Fill out the Daily Training Tracking Spreadsheet as the day progresses (located in BNA AT Ops share)
- 11) Update Traffic Count in Count Ops (Typically performed by a OS)
- 12) Check MSAW at each TCW (Multifunction Z, A, ENTER)
- 13) Complete the next day's spreader on paper worksheet
- 14) Review the Facility Log (7230-4) for completeness, accuracy, and correct errors. Enter WCLC.
- 15) Check AISR Messages for GENOTs. (See instructions below)
- 16) Ensure emergency frequencies are being monitored in the operation.

Additionally, on Saturdays only:

- 1) Conduct two-way ground-to-air checks on 121.5 and 243.0. If 243.0 cannot be checked due to lack of UHF-equipped aircraft, make entry in the Facility Log and carryover until check can be completed.
- 2) Check "Orange By-Pass Jacks" at all ETVS positions.
- 3) Check PET 2000 Transceivers with commercial power and battery power in TOWER and TRACON.
- 4) Verify operation of each Plain Old Telephone (POT) analog line.

a) POT at LC2: [REDACTED]

b) POT at SER: [REDACTED]

c) POT at SI: [REDACTED]

5) Enter "Saturday WCLC" on the Facility Log (7230-4) to indicate these checks are complete

Reminder: When BNA goes into HOLDING do the following:

- a) Notify adjacent ZME sectors
- b) Notify ZME TMU
- c) Log entry in Facility Log (7230-4)

GENOT – instructions:

- a) If a GENOT is received during ADMIN Hours, immediately print message and forward to the OM/ATM or current designee for further processing.
- b) If a GENOT is received during NON-ADMIN Hours:
 - 1) Contact the OM/ATM to determine if GENOT content is applicable to the facility.
 - 2) If GENOT is determined to be applicable or if the OM/ATM cannot be reached, WS will make two copies of the GENOT and attach a briefing sign-off sheet to both.
 - 3) Distribute one to Tower and one to TRACON.
 - 4) Ensure workforce is briefed as soon as practicable and/or prior to performing operational duties.
 - 5) On the next federal business (ADMIN) day, attach hard copies of GENOT and sign-off sheets to the Facility Log.

APPENDIX 2-4: 1600 LOCAL WATCH CHECKLIST

1600 Local Watch Checklist

- 1) Compare DASI altimeter readings with the displayed altimeter setting of ASOS. If correction factor exceeds .02, remove from service and use ASOS altimeter.
- 2) Review TAF and NOTAMs on appropriate website and update IDS
- 3) Make a visual check of the RVR, LLWAS Ribbon Display, and the WME data in the IDS
- 4) Check weather and forecasted weather to see if PIREPS are required per FAA JO 7110.65. If PIREPS are required, click the SOLICIT PIREPS button, enter PIREPS on the main page of the IDS, enter PIREPS into the AISR or send to ZME FD as required.
- 5) Check CEDAR Calendar for daily events
- 6) Fill in the Daily Training Tracking Spreadsheet
- 7) Update Traffic Count in Count Ops (Typically performed by a WS)
- 8) Check AISR Messages for GENOTs. (See instructions below)
- 9) Review the Facility Log (7230-4) for completeness, accuracy, and correct errors. Enter WCLC.

- 10) Ensure emergency frequencies are being monitored in the operation.

Reminder: At 2359z, bundle daily strips and place in Front Office bin located next to ARE

Reminder: When BNA goes into HOLDING do the following:

- a) Notify adjacent ZME sectors
- b) Notify ZME TMU
- c) Log entry in Facility Log (7230-4)

GENOT – instructions:

- a) If a GENOT is received during ADMIN Hours, immediately print message and forward to the OM/ATM or current designee for further processing.
- b) If a GENOT is received during NON-ADMIN Hours:
 - 1) Contact the OM/ATM to determine if GENOT content is applicable to the facility.
 - 2) If GENOT is determined to be applicable or if the OM/ATM cannot be reached, WS will make two copies of the GENOT and attach a briefing sign-off sheet to both.
 - 3) Distribute one to Tower and one to TRACON.
 - 4) Ensure workforce is briefed as soon as practicable and/or prior to performing operational duties.
 - 5) On the next federal business (ADMIN) day, attach hard copies of GENOT and sign-off sheets to the Facility Log.

APPENDIX 2-5: MIDNIGHT LOCAL WATCH CHECKLIST

Midnight Local Watch Checklist

- 1) Compare DASI altimeter readings with the displayed altimeter setting of ASOS. If correction factor exceeds .02, remove from service and use ASOS altimeter.
- 2) Review TAF and NOTAMs on appropriate website and update IDS.
- 3) Make a visual check of the RVR, LLWAS Ribbon Display, and the WME data in the IDS.
- 4) Check weather and forecasted weather to see if PIREPS are required per FAA JO 7110.65. If PIREPS are required, click the SOLICIT PIREPS button, enter PIREPS on the main page of the IDS, enter PIREPS into the AISR or send to ZME FD as required.
- 5) Check CEDAR Calendar for daily events.
- 6) Check AISR Messages for GENOTs. (See instructions below)
- 7) Review the Facility Log (7230-4) for completeness, accuracy, and correct errors. Enter COB, then print and sign the Facility Log (7230-4).
- 8) When opening new day's log, sign on, enter WCLC, and enter all carry-over items.

9) Ensure emergency frequencies are being monitored in the operation.

Reminder: When BNA goes into HOLDING do the following:

- a) Notify adjacent ZME sectors
- b) Notify ZME TMU
- c) Log entry in Facility Log (7230-4)

GENOT – instructions:

- a) If a GENOT is received during ADMIN Hours, immediately print message and forward to the OM/ATM or current designee for further processing.
- b) If a GENOT is received during NON-ADMIN Hours:
 - 1) Contact the OM/ATM to determine if GENOT content is applicable to the facility.
 - 2) If GENOT is determined to be applicable or if the OM/ATM cannot be reached, WS will make two copies of the GENOT and attach a briefing sign-off sheet to both.
 - 3) Distribute one to Tower and one to TRACON.
 - 4) Ensure workforce is briefed as soon as practicable and/or prior to performing operational duties.
 - 5) On the next federal business (ADMIN) day, attach hard copies of GENOT and sign-off sheets to the Facility Log.

APPENDIX 2-6: TOWER WATCH CHECKLIST

Tower Watch Checklist

- 1) Check all ALSF and MALSR. Unless required for operation, turn off.
- 2) Check light guns.
- 3) At 0715 daily, check the ARFF line in the tower. The phraseology, "Nashville Tower with an ARFF line check, how do you hear?" is to be used.
- 4) Advise the SI when Tower Checklist is completed.
- 5) Ensure emergency frequencies are being monitored in the operation.

APPENDIX 2-7: RUNWAY CHANGE CHECKLIST

Runway Change Checklist

1. All communication will be completed over a recorded line.
2. SC will coordinate with SI to determine runway/approach.
3. SC and SI will determine last arrival and departure on current runway configuration, and the first arrival to the new runway configuration then, notify the appropriate positions.

Note: Unless otherwise coordinated, Tower has automatic releases on new runway configuration after the last arrival has landed on current runway configuration.

4. SC will coordinate with LOCAL position(s) to establish resolution of any conflicting traffic during transition.
5. SI will coordinate with Departure/Arrival/Final positions to establish resolution of any conflicting traffic during transition.
6. SI will notify the following facilities of new runway configuration and type of approach:
 - a) Adjacent ZME Sectors
 - b) ZME TMU (including flow rates)
 - c) MQY Tower
 - d) JWN Tower
7. SC will ensure the following settings are correct:

- a) ATIS
- b) TCW Maps
- c) STARS SIA
- d) LLWAS Ribbon display
- e) Localizers
- f) Approach lighting
- g) Airfield lighting panel
- h) Tower RVR display

8. SI will ensure the following settings are correct:

- a) STARS Configuration
- b) EFSTS Printer Configuration (scan strip)
- c) TCW Maps
- d) TRACON RVR display
- e) IDS Configuration

9. SI will ensure runway change entry on Facility Log (7230-4).

10. Straight 31 Operation

- a) SC will ensure CD/GC assign appropriate departure frequency
- b) SI will ensure MQY departure strips are posted on FRE position
- c) SI will ensure EFSTS Printer Configuration (scan strip)

APPENDIX 2-8: RUNWAY CLOSURE CHECKLIST

Runway Closure Checklist

1. SC will coordinate with SI the closed or inactive runway
2. SC will coordinate with all tower positions and ensure the use of appropriate memory aids.
3. SC will ensure that the ATIS is updated to reflect the runway closure.
4. SC will ensure proper entries made on the IDS main page and graphic page for the closed/inactive runway.
5. SC will ensure the runway lights to the closed runway are off, as appropriate. The hold short signs are on the same circuit as the runway edge lights, therefore the runway edge lights must be left on.
6. SC will ensure the approach lights, if applicable, to the closed runway are off, as appropriate.
7. SC will ensure the correct runway status is properly selected in the ITWS.
8. SI will inform all RADAR positions of closure.
9. SI will enter the runway/taxiway closing information on Facility Log (7230-4).
10. SI will coordinate the flow rate with ZME TMU.

APPENDIX 2-9: RUNWAY OPENING CHECKLIST

Runway Opening Checklist

1. SC will coordinate with SI the opening runway configuration.
2. SC will coordinate with all tower positions and ensure the use of appropriate memory aids.
3. SC will ensure that the ATIS is updated to reflect the runway available.
4. SC will ensure proper entries made on the IDS main page.
5. SC will ensure the ILS to the opening runway is selected and operational, as appropriate.
6. SC will ensure the runway lights to the opening runway are on, as appropriate.
7. SC will ensure the approach lights, if applicable, to the opening runway are on, as appropriate.
8. SC will ensure the correct runway status is properly selected in the ITWS.
9. SI will inform all RADAR positions of the opening runway.
10. SI will enter the runway/taxiway information on Facility Log (7230-4).
11. SI will coordinate the flow rate with ZME TMU.

APPENDIX 2-10: SIGNIFICANT OUTAGES REPORT

INITIAL REPORT (Within 5 Minutes of Outages)

NOTIFY (ROC)

PHONE

LOCATION OF OUTAGE:

TIME:

NATURE OF OUTAGE:

WHAT BACKUP IS IN USE

FOLLOW-UP REPORT (30 Minutes After Initial Report)

ADDITIONAL DETAILS:

HOW WELL DID TRANSITION TO BACKUP PROCEED:

CURRENT SITUATION:

WHAT ATC RESTRICTIONS HAVE BEEN IMPLEMENTED?

ANY KNOW ATC IMPACTS:

APPENDIX 2-11: ASR-9 OUTAGE CHECKLIST

ASR-9 OUTAGE CHECKLIST

1. Regardless of scheduled or unscheduled, call an **ATC ALERT** because of reduced radar equipment (see Contingency Binder for ALERT information).
2. **Disable ASR-9 feed to STARS.** Using the STARS keyboard, type “F7 2STB D”. It is important to have the feed disabled, otherwise test targets may be displayed erroneously.
3. Printing **KBNA arrival strips** is required per the SOP since we are reduced to a single RADAR feed (see IDS > Printer Configurations for appropriate setting).
4. Provide a **writing pad** to FRE and LC. Writing call signs and approach clearances is mandatory for the Final and LC sector during this timeframe.
5. FUSION is authorized with both ADSB and QOJ LRR feed. If either are OTS, FUSION is not authorized.
6. Regardless of FUSION status, BNA Tower is still authorized to use 15 degrees’ divergence between successive or parallel departures. Reference FAAO 7110.65, 5-8-3.
7. If FUSION is not utilized, 3NM lateral separation is still authorized in most of BNA airspace – 5NM lateral separation is required southeast of MBT as depicted on STARS map 15. *Reference JO 7110.65, 5-5-4.*
8. If FUSION is not utilized, BNA TRACON cannot use 15 degrees’ divergence as a form of separation but may accept that form of separation from the control tower as long as they do nothing to minimize the separation the tower provides them – 45 degrees is the minimum degrees’ divergence the TRACON may initiate for separation.
9. Notify JWN FCT to forward arrival times or cancellation of IFR flight plans when adequate radar coverage does not exist to within ½ mile of the approach end of the runway(s) in use.
10. Notify MQY of the reduced radar equipment.

When the BNA ASR-9 is returned:

1. Using the STARS keyboard, select “F7 2STB E” to enable the feed
2. Ensure STARS is operating in FUSION mode via the DCB.
3. Return to the printer configuration that does not print KBNA arrival strips.
4. Inform JWN and MQY.
5. Terminate the ATC ALERT (see Contingency Binder for ALERT information).

APPENDIX 2-12: FSL TO DSA CHECKLIST

Full-Service Level (FSL) to Direct Sensor Access (DSA) **CHECKLIST**

When FSL becomes unavailable due to outage or maintenance AND the BNA ASR-9 radar is operational, perform the following:

1. Personnel must advise the WS when circumstances merit a mode transition.
2. If it is determined to transition from FSL to DSA, the WS must advise all personnel to transition to DSA mode. MQY FCT must be notified STARS FSL is OTS. *Note: MQY FCT does not have DSA/DSF capabilities.*
3. Press and hold the F16 button, then press “D” to transition the TCW/TDW to DSA.
 - DSA can also be selected by using the DCB
 - Click on the MODE DCB button
 - Click on the DSA button on the MODE submenu
 - Click on the ACCEPT button on the confirmation submenu
 - Click on the DONE button
4. The WS must ensure all effected adjacent facilities are advised.
5. The WS must collaborate with TMU and determine the appropriate flow control initiatives.
6. Call ZME Flight Data to change printer configuration to the current configuration with “Plus” (i.e. Alpha to Alpha Plus).
7. A descriptive entry must be made in the Facility Log (7230-4) whenever a mode transition takes place.
8. Review page 2 of this document for DSA system expectations and operational changes while in DSA mode.

DSA System Expectations:

- DSA is scope specific - if one radarscope is placed in DSA mode, only that specific scope will be operating in DSA mode.
- When DSA mode is selected, DSA will appear in the System Status Area (SSA) in yellow.
- Any information entered on a radar scope in DSA mode, will not be displayed on other scopes
- MSAW and Conflict Alerts are not available
- The emergency codes (7500, 7600 and 7700) are all automatically monitored in DSA
- Scratch pads are not available. Information must be verbally coordinated in lieu of scratch pad entries.
- Flight Plan processing and automatic handoff features are not available.
- Manual handoffs must be performed, both inter and intra-facility
- Aircraft on non-discrete beacon codes (i.e. 1200 code), cannot be tagged
- MIN key, PTLs, CRDA/Ghost Targets, ATPA, Pref Sets, keyboard coupling (for AD/DD positions), SISO, SPC code (i.e. EM, RF, IN) are not available in DSA mode.

ATCT Operational Changes:

- Issue departing aircraft the ZME ERAM assigned discrete beacon code
- Coordinate with TRACON for releases of departure aircraft
- Input Departure Messages (DM) into the FDIO for BNA departures.
- Altimeter Setting
 - Auto update of altimeter is not available in DSA mode.
 - Manually update altimeter by pressing F7, S, (altimeter), <ENTER>
- Use Cru-ART to update position logs.

TRACON Operational Changes:

- TRACON provides ATCT with the arrival sequence. At a minimum include the:
 - ACID
 - Discrete Beacon Code
 - Aircraft Type
 - Landing Runway
- Input Departure Messages (DM) into the FDIO for satellite airport departures.
- Check the following items and update where necessary:
 - Display all Beacon Codes. Press BCNR key (upper left-most function key, not labeled)
 - Correlate tracks and flight progress strips
 - Scan for and resolve and potential conflicts
- Use Cru-ART to update position logs.

Returning to FSL mode:

1. If it is determined to transition from DSA to FSL, the WS must advise all personnel to transition to FSL mode (including MQY FCT).
2. Press and hold the F16 button, then press “D” to transition the TCW/TDW to FSL mode.
 - FSL can also be selected using the DCB.
 - Click on the MODE DCB button
 - Click on the FSL button on the MODE submenu
 - Click on the ACCEPT button on the confirmation submenu
 - Click on the DONE button
3. Check the following items and update where necessary:
 - a. Altimeter setting
 - i. Verify altimeter is in auto mode by the altimeter having an ‘A’ after it.
 - ii. Enable auto altimeter by pressing F7, A, BNA <SPACE> A, <ENTER>
 - b. Enter STARS configuration
 - c. Restore flight plan information (in FDIO: type RB <SPACE> BBB, <ENTER>)
4. Check that all targets are on unique codes. While in DSA, more than one aircraft may have had the same discreet code.
5. Scan for and resolve any potential conflicts.
6. The WS must ensure all previously effected adjacent facilities are advised.
7. The WS must collaborate with TMU and determine the appropriate flow control initiatives.
8. Call ZME Flight Data to change printer configuration back to the current configuration without “Plus” (i.e. Alpha Plus to Alpha).
9. A descriptive entry must be made in the Facility Log (7230-4) whenever a mode transition takes place.

APPENDIX 3: TRANSFER OF POSITION RESPONSIBILITY

APPENDIX 3-1: SELF-BRIEF CHECKLIST

RECORD ALL BRIEFINGS

This checklist MUST be used by all controllers prior to relieving any control position.

A. STATUS INFORMATION AREAS:

1. ATIS
2. Current Weather (IDS, IFR/Marginal VFR/VFR)
3. Pertinent PIREPs
4. SIGMETs/CWAs
5. Pertinent NOTAMs/Special Notices

B. EQUIPMENT STATUS (Equipment itself, Facility Log (7230-4))

1. Status of Positions/Configuration
2. Communication (Radios and ETVS)
3. RADAR (FSL/DSA)
4. Airfield Lighting (correct flow, outages)
5. ILS Status (outages including approach lights)

C. LOCAL AIRPORT STATUS/ACTIVITIES: (STARS)

1. Approaches in Use
2. Airspace Configuration
3. Runway Status
4. Taxiway Closures(tower)
5. Special Conditions
6. Mowing/Construction(tower)

D. WEATHER TRENDS

E. FLOW CONTROL (ensure placards correctly reflect flow)

1. Ground Stops and EDCTs
2. CFRs

APPENDIX 3-2: WATCH SUPERVISION POSITION RELIEF BRIEFING -- TOWER OR TRACON

RECORD ALL BRIEFINGS

A. OPERATIONS

1. STAFFING

- a. SI/SC
- b. ATCT/TRACON Resources/Issues
- c. Overtime
- d. Employee Requests

2. Traffic Volume/Complexity/Flows

3. Constraints/TMIs Including Airport Issues

4. Current Weather, Trends, & Forecast Including Unusual Weather

5. Training

- a. OJT (Current/Planned)
- b. OJT Tracker
- c. Training Team Activities

6. Operational Currency

- a. AOV Credentialing
- b. Required OTS and Certifications

7. Briefings/Meetings/Facility Events

8. Equipment Issues/Impacts/Required Actions/Position Configuration

9. Special AT Events/Facility Security/Environmental Issues

B. ADMINISTRATIVE

1. Watch Checklist and Status (Completed/Required Actions)

2. Event Coordination and Reporting (MORs, Accident/Incident, Public Inquiries)

3. WMT Scheduler (ART/CRU-X, CEDAR/TEAM)

4. Delays/Traffic Count & Other Operational Shift Data/Documents

5. Employee Items

- a. Medical
- b. ART 45
- c. Excused Absence

C. MISCELLANEOUS INFORMATION

- 1. Unusual Issues
- 2. Awareness Items

APPENDIX 3-3: SI/TRACON CIC POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

A. STATUS INFORMATION AREA: (IDS, NOTAMs, Facility Log (7230-4))

- 1. ATIS
- 2. Advertised Approaches
- 3. Runway Status (active, inactive, closed or unavailable)
- 4. Current Weather, Trends, & Forecast (reported weather and other weather related information)
- 5. Unusual weather (PIREPs/SIGMETs/Severe Weather Warnings, Icing)
- 6. IDS/NOTAMs/Special Notices (ensure all personnel are briefed, check GENOTs via AISR)
- 7. Weather on RADAR and quality of presentation
- 8. Equipment on Standby Generator

B. EQUIPMENT STATUS: (Address ALL that are NOT FULLY operational or that are not in the normal configuration)

- 1. Facility Log (7230-4)
- 2. ASR-9 and Mode S Panels
- 3. STARS Equipment Status and Configuration
- 4. Status of Positions/Configuration
- 5. Communication (Radios and ETVS)

6. RADAR (FSL=Full Svc Level, DSA=Direct Sensor Access)
7. Check operation of MSAW Alarm

NOTE: *If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

C. MISCELLANEOUS INFORMATION

1. Visitors
2. Special Projects/Assignments
3. Status of KBNA Arrival Strips

D. STAFFING:

1. Position Assignments, Staff available for Relief, Lunch Breaks
2. OJT in Progress/Planned, Briefings & Meetings, Other Duties
3. Leave Requests, Time Outside Shift (TOS), Physicals

E. SPECIAL OPERATIONS:

1. Military (Including TNARNG)
2. Flight Check
3. Fly-ins, Parachute Activity, Gliders, Balloons, Special Events
4. Suspect Aircraft, Suspicious Pilot Activity

F. TRAFFIC STATUS (Including Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Anticipated Delays (Weather, TMU Initiatives, Gate Holds)
2. Low Activity or Gate Hold Procedures with ZME
3. Ground Stops and EDCTs
4. UAS activity of operational importance

If combined with WS include:

- A. Overtime
- B. Operational Currency
- C. Administrative
 1. Watch Checklist and Status (Completed/Required Actions)
 2. Event Coordination and Reporting (MORs, Accident/Incident, Public Inquiries)

3. WMT Scheduler (ART/CRU-X, CEDAR/TEAM)
4. Delays/Traffic Count & Other Operational Shift Data/Documents

APPENDIX 3-4: SC/TOWER CIC POSITION RELIEF BRIEING

RECORD ALL BRIEFINGS

- A. STATUS INFORMATION AREA: (IDS, NOTAMs, Facility Log (7230-4))
 1. ATIS
 2. Advertised Approaches
 3. Runway Status (active, inactive, closed or unavailable)
 4. Taxiway closures
 5. Special Conditions (Braking Action, Bird Reports, Mowing, Construction)
 6. Current Weather, Trends, & Forecast (reported weather and other weather related information)
 7. Unusual weather (PIREPs/SIGMETs/Severe Weather Warnings, Icing)
 8. IDS/NOTAMs/Special Notices (ensure all personnel are briefed, check GENOTs via AISR)
 9. Weather on RADAR and quality of presentation
 10. Equipment on Standby Generator
- B. EQUIPMENT STATUS: (Address ALL that are NOT FULLY operational or that are not in the normal configuration)
 1. Facility Log (7230-4)
 2. Airfield Lighting (ON/OFF as appropriate, flow, outages)
 3. ILS Status
 4. ASR-9 and Mode S Panels
 5. STARS Equipment Status and Configuration
 6. Status of Positions/Configuration
 7. Communication (Radios and ETVS)
 8. RADAR (FSL=Full Svc Level, DSA=Direct Sensor Access)
 9. Check operation of MSAW Alarm

NOTE: *If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

C. MISCELLANEOUS INFORMATION

1. Visitors
2. Special Projects/Assignments

D. STAFFING

1. Position Assignments, Staff available for Relief, Lunch Breaks
2. OJT in Progress/Planned, Briefings & Meetings, Other Duties
3. Leave Requests, Time Outside Shifts (TOS), Physicals

E. SPECIAL OPERATIONS

1. Military (Including TNARNG)
2. Flight Check
3. Fly-ins, Parachute Activity, Gliders, Balloons, Special Events
4. Suspect Aircraft, Suspicious Pilot Activity

F. TRAFFIC STATUS (Including Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Anticipated Delays (Weather, TMU Initiatives, Gate Holds)
2. Low Activity or Gate Hold Procedures With ZME
3. Ground Stops and EDCTs
4. UAS activity of operational importance

If combined with WS include:

D. Overtime

E. Operational Currency

F. Administrative

1. Watch Checklist and Status (Completed/Required Actions)
2. Event Coordination and Reporting (MORs, Accident/Incident, Public Inquiries)
3. WMT Scheduler (ART/CRU-X, CEDAR/TEAM)
4. Delays/Traffic Count & Other Operational Shift Data/Documents

APPENDIX 3-5: CD/FD POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

A. Self-Brief: (APPENDIX 3-1)

B. EQUIPMENT STATUS: (Not fully operational or not in normal configuration for the flow)

1. Status of Positions/Configuration

2. NAVAIDS

3. RADAR (FSL/DSA)

4. Radios

Note: If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.

C. SYSTEMS AREA

1. Runway Status (active/inactive/closed/unavailable)

2. ATIS

3. Approaches in Use

4. Current Conditions (Braking Action, Bird Reports)

D. Weather Trends (reported weather and other weather related information)

E. Special Activities/Coordination Agreements

F. TMU Initiatives, Ground Stops, EDCTs, CFRs

G. Traffic (including aircraft standing by, communication status of all known aircraft, UAS activity of operational importance)

APPENDIX 3-6: GC POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

A. Self-Brief: (APPENDIX 3-1)

B. EQUIPMENT STATUS: (not fully operational or not in normal configuration for the flow)

1. **Status of Positions/Configuration**

2. Communication (Mains/Standbys)

3. RADAR (FSL/DSA)

***Note:** If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

C. Airport Status/Activities:

1. ATIS

2. Approaches

3. **Runways in Use and Status** (active/inactive/closed/unavailable)

D. **WEATHER/TRENDS** (reported weather and other weather related information)

E. **SPECIAL ACTIVITIES/OPERATIONS:** (Flight Check, New Procedures, Handwritten Notes)

F. **When Combined:** with CD/FD, Include TMU Initiatives, Ground Stops, EDCTs, CFRs

G. **TRAFFIC** (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Moving Aircraft

2. Holding Aircraft

3. Vehicles/Mowers

4. Point Out Traffic

5. Aircraft Released But Not Taxiing

6. VFR Advisories

7. Aircraft Standing By For Services

8. Special Problems, Requests or Instructions

9. UAS activity of operational importance

Appendix 3-7: LC1 POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

A. Self-Brief: (APPENDIX 3-1)

B. EQUIPMENT STATUS: (not fully operational or not in normal configuration for the flow)

1. **Status of Positions/Configuration**

2. Communication (Mains/Standbys)

3. RADAR (FSL/DSA)

***Note:** If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

C. Airport Status/Activities:

1. ATIS

2. Approaches

3. **Runways in Use and Status** (active/inactive/closed/unavailable)

D. **WEATHER/TRENDS:** (reported weather and other weather related information)

E. **SPECIAL ACTIVITIES/OPERATIONS:** (Flight Check, New Procedures, Handwritten Notes)

F. **When Combined:** with GC/CD/FD Include TMU Initiatives, Ground Stops, EDCTs, CFRs

G. **TRAFFIC** (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Point Out Aircraft

2. Holding Aircraft

3. Untagged Primary Targets

4. Aircraft Handed Off Still In Airspace

5. Aircraft Released But Not Airborne

6. VFR Advisories

7. Aircraft Standing By For Services

8. Vehicles/Mowers Impacting Operation

9. Special Problems, Requests or Instructions

10. UAS activity of operational importance

APPENDIX 3-8: LC2 POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

A. Self-Brief: (APPENDIX 3-1)

B. EQUIPMENT STATUS: (not fully operational or not in normal configuration for the flow)

1. Status of Positions/Configurations

2. Communication (Mains/Standbys)

3. RADAR (FSL/DSA)

Note: If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.

C. Airport Status/Activities:

1. ATIS

2. Approaches

3. Runways in Use and Status (active/inactive/closed/unavailable)

D. WEATHER/TRENDS: (reported weather and other weather related information)

E. SPECIAL ACTIVITIES/OPERATIONS: (Flight Check, New Procedures, Handwritten Notes)

F. TRAFFIC (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Point Out Aircraft

2. Holding Aircraft

3. Untagged Primary Targets

4. Aircraft Handed Off Still In Airspace

5. Aircraft Released But Not Airborne

6. VFR Advisories

7. Aircraft Standing By For Services

8. Vehicles/Mowers Impacting Operation
9. Special Problems, Requests or Instructions
10. UAS activity of operational importance

APPENDIX 3-9: CC2 POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

- A. Self-Brief: (APPENDIX 3-1)
- B. EQUIPMENT STATUS: (not fully operational or not in normal configuration for the flow)

1. Status of Positions/Configuration

2. Communication (Mains/Standbys)

3. RADAR (FSL/DSA)

Note: If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.

- C. Airport Status/Activities:

1. ATIS

2. Approaches

3. Runways in Use and Status (active/inactive/closed/unavailable)

- D. WEATHER/TRENDS: (reported weather and other weather related information)

- E. SPECIAL ACTIVITIES/OPERATIONS: (Flight Check, New Procedures, Handwritten Notes)

- F. TRAFFIC (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Point Out Aircraft

2. Holding Aircraft

3. Untagged Primary Targets

4. Aircraft Handed Off Still In Airspace

5. Aircraft Released But Not Airborne

6. VFR Advisories
7. Aircraft Standing By For Services
8. Vehicles/Mowers
9. TMU Delays
10. Special Problems, Requests or Instructions
11. UAS activity of operational importance

APPENDIX 3-10: ARE-ARW POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

- A. Self-Brief: (APPENDIX 3-1)
- B. EQUIPMENT STATUS: (not fully operational or not in normal configuration for the flow)

1. **Status of Positions/Configuration**

2. Communication (Mains/Standbys)

3. RADAR (FSL/DSA)

***Note:** If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

- C. Airport Status/Activities:

1. ATIS

2. Approaches

3. **Runways in Use and Status** (active/inactive/closed/unavailable)

- D. **WEATHER/TRENDS:** (reported weather and other weather related information)

- E. **SPECIAL ACTIVITIES/OPERATIONS:** (Flight Check, New Procedures, Handwritten Notes)

- F. **TRAFFIC** (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Point Out Aircraft

2. Holding Aircraft
3. Untagged Primary Targets
4. Aircraft Handed Off Still In Airspace
5. Aircraft Released But Not Airborne
6. VFR Advisories
7. Aircraft Standing By For Services
8. Special Problems, Requests or Instructions
9. UAS activity of operational importance

APPENDIX 3-11: DRE-DRW POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

- A. Self-Brief: (APPENDIX 3-1)
- B. EQUIPMENT STATUS: (not fully operational or not in normal configuration for the flow)

1. Status of Positions/Configuration

2. Communication (Mains/Standbys)
3. RADAR (FSL/DSA)

***Note:** If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

- C. Airport Status/Activities:

1. ATIS
2. Approaches
3. **Runways in Use and Status** (active/inactive/closed/unavailable)

- D. **WEATHER/TRENDS:** (reported weather and other weather related information)

- E. **SPECIAL ACTIVITIES/OPERATIONS:** (Flight Check, New Procedures, Handwritten Notes)

F. **TRAFFIC** (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Point Out Aircraft
2. Holding Aircraft
3. Untagged Primary Targets
4. Aircraft Handed Off Still In Airspace
5. Aircraft Released But Not Airborne
6. VFR Advisories
7. Aircraft Standing By For Services
8. Special Problems, Requests or Instructions
9. UAS activity of operational importance

APPENDIX 3-12: FRE-FRW POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

A. Self-Brief: (APPENDIX 3-1)

B. EQUIPMENT STATUS: (not fully operational or not in normal configuration for the flow)

1. **Status of Positions/Configuration**
2. Communication (Mains/Standbys)
3. RADAR (FSL/DSA)

***Note:** If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

C. Airport Status/Activities:

1. ATIS
2. Approaches
3. **Runways in Use and Status** (active/inactive/closed/unavailable)

D. **WEATHER/TRENDS:** (reported weather and other weather related information)

E. **SPECIAL ACTIVITIES/OPERATIONS:** (Flight Check, New Procedures, Handwritten Notes)

F. **TRAFFIC** (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Point Out Aircraft
2. Holding Aircraft
3. Untagged Primary Targets
4. Aircraft Handed Off Still In Airspace
5. Aircraft Released But Not Airborne
6. VFR Advisories
7. Aircraft Standing By For Services
8. Special Problems, Requests or Instructions
9. UAS activity of operational importance

APPENDIX 3-13: SRE POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

A. Self-Brief: (APPENDIX 3-1)

B. EQUIPMENT STATUS: (not fully operational or not in normal configuration for the flow)

1. **Status of Positions/Configuration**
2. Communication (Mains/Standbys)
3. RADAR (FSL/DSA)

***Note:** If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

C. Airport Status/Activities:

1. ATIS
2. Approaches

3. **Runways in Use and Status** (active/inactive/closed/unavailable)
- D. **WEATHER/TRENDS**: (reported weather and other weather related information)
- E. **SPECIAL ACTIVITIES/OPERATIONS**: (Flight Check, New Procedures, Handwritten Notes)
- F. **TRAFFIC** (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)
 1. Point Out Aircraft
 2. Holding Aircraft
 3. Untagged Primary Targets
 4. Aircraft Handed Off Still In Airspace
 5. Aircraft Released But Not Airborne
 6. VFR Advisories
 7. Aircraft Standing By For Services
 8. Special Problems, Requests or Instructions
 9. UAS activity of operational importance

APPENDIX 3-14: AD-DD POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

- A. Self-Brief: (APPENDIX 3-1)
- B. **EQUIPMENT STATUS**: (not fully operational or not in normal configuration for the flow)
 1. **Status of Positions/Configuration**
 2. Communication (Mains/Standbys)
 3. **RADAR** (FSL/DSA)

***Note:** If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

- C. **Airport Status/Activities**:

1. ATIS
 2. Approaches
 3. **Runways in Use and Status** (active/inactive/closed/unavailable)
- D. **WEATHER/TRENDS**: (reported weather and other weather related information)
- E. **SPECIAL ACTIVITIES/OPERATIONS**: (Flight Check, New Procedures, Handwritten Notes)
- F. **TRAFFIC** (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)
1. Point Out Aircraft
 2. Holding Aircraft
 3. Untagged Primary Targets
 4. Aircraft Handed Off Still In Airspace
 5. Aircraft Released But Not Airborne
 6. VFR Advisories
 7. Aircraft Standing By For Services
 8. Special Problems, Requests or Instructions
 9. UAS activity of operational importance

Appendix 3-15: CI1 POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

- A. Self-Brief: (APPENDIX 3-1)
- B. EQUIPMENT STATUS: (not fully operational or not in normal configuration for the flow)
1. **Status of Positions/Configuration**
 2. Communication (Mains/Standbys)
 3. RADAR (FSL/DSA)

***Note:** If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

C. Airport Status/Activities:

1. ATIS
2. Approaches
3. **Runways in Use and Status** (active/inactive/closed/unavailable)

D. **WEATHER/TRENDS**: (reported weather and other weather related information)

E. **SPECIAL ACTIVITIES/OPERATIONS**: (Flight Check, New Procedures, Handwritten Notes)

F. **TRAFFIC** (Include Pre-arranged Coordination, Special Requests, and communication status of all known aircraft)

1. Point Out Aircraft
2. Holding Aircraft
3. Untagged Primary Targets
4. Aircraft Handed Off Still In Airspace
5. Aircraft Released But Not Airborne
6. VFR Advisories
7. Aircraft Standing By For Services
8. Special Problems, Requests or Instructions
9. UAS activity of operational importance

APPENDIX 3-16: CI2 POSITION RELIEF BRIEFING

RECORD ALL BRIEFINGS

A. Self-Brief: (APPENDIX 3-1)

B. EQUIPMENT STATUS: (Not fully operational or not in normal configuration for the flow)

1. **Status of Positions/Configuration**
2. NAVAIDS

3. RADAR (FSL/DSA)

4. Radios

***Note:** If a handset is being utilized, ensure that the communications are routed through the speaker and that the speaker volume is set at an adequate level.*

C. SYSTEMS AREA

1. **Runway Status** (active/inactive/closed/unavailable)

2. ATIS

3. Approaches in Use

4. Current Conditions (Braking Action, Bird Reports)

D. **Weather Trends** (reported weather and other weather related information)

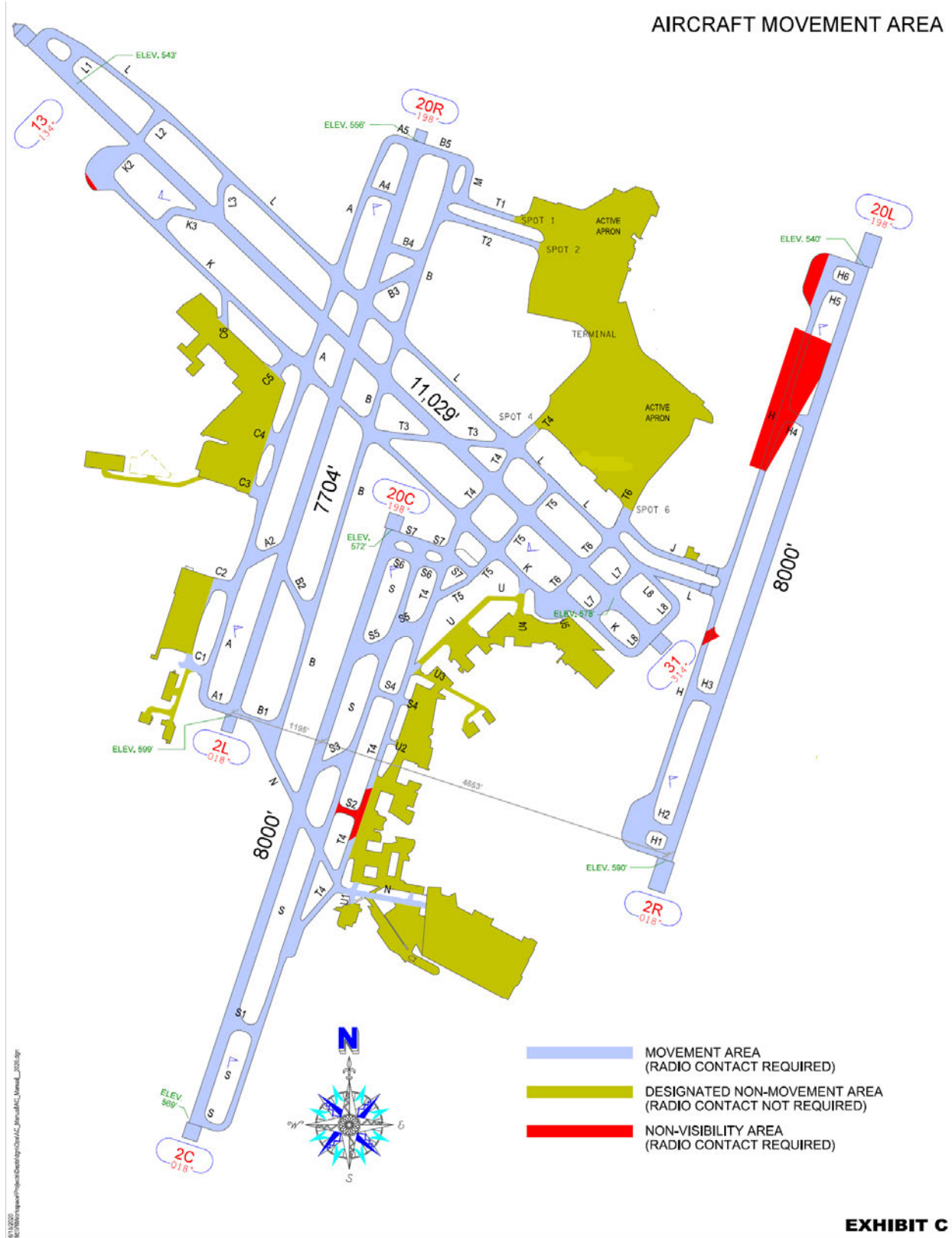
E. **Special Activities/Coordination Agreements**

F. TMU Initiatives, Ground Stops, EDCTs, CFRs

APPENDIX 4: (RESERVED FOR FUTURE USE)

APPENDIX 5: (RESERVED FOR FUTURE USE)

APPENDIX 6-1: GROUND CONTROL MOVEMENT / NON-MOVEMENT AREAS



NAVIGATIONAL AIDS

REIL 13-31

VORTAC

ILS CAT I MALSF 20R

ILS CAT I MALSR 20L

ALSF II ILS CAT IIB 2L

ALSF II ILS CAT IIB 2R

ALSF II ILS CAT IIB 2C

FAA CONTROL TOWER

FIRE STATION

TERMINAL

ACTIVE APRON

SPOT 1

SPOT 2

SPOT 4

SPOT 6

SPOT 7

SPOT 8

SPOT 9

SPOT 10

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SPOT 320

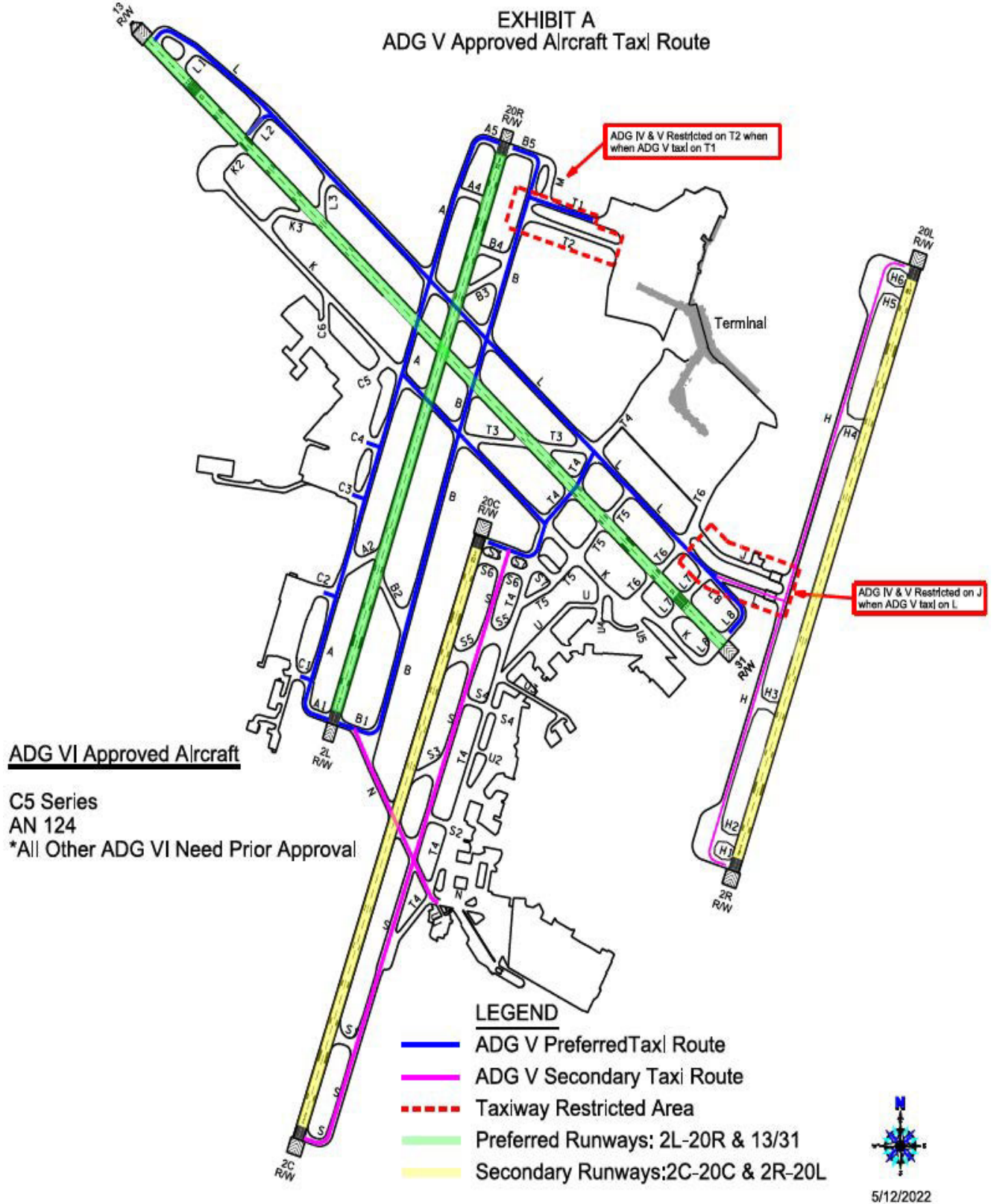
SPOT 321

SPOT 322

SPOT 32

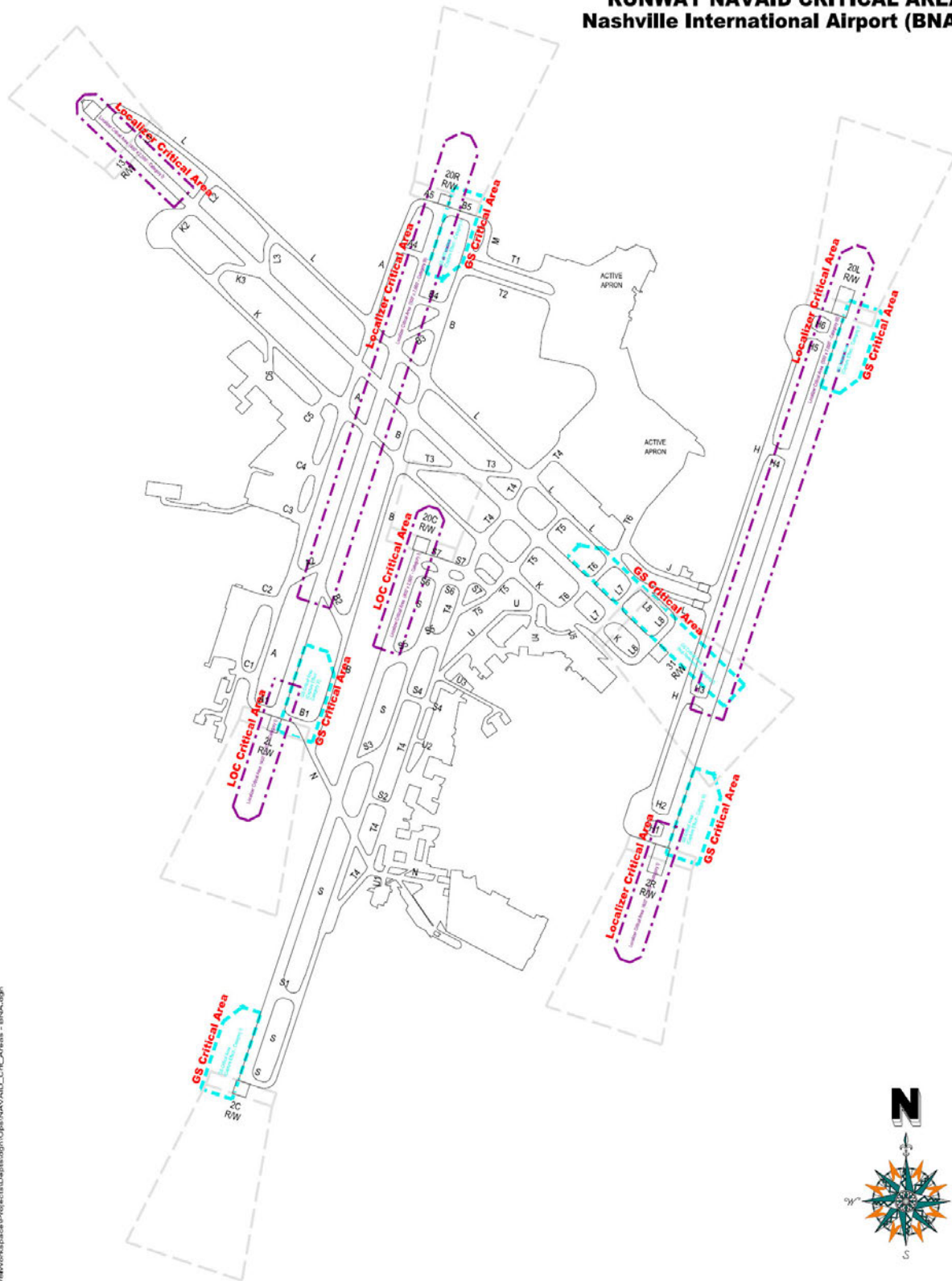
APPENDIX 6-3: GROUP V TAXI ROUTE

EXHIBIT A
ADG V Approved Aircraft Taxi Route



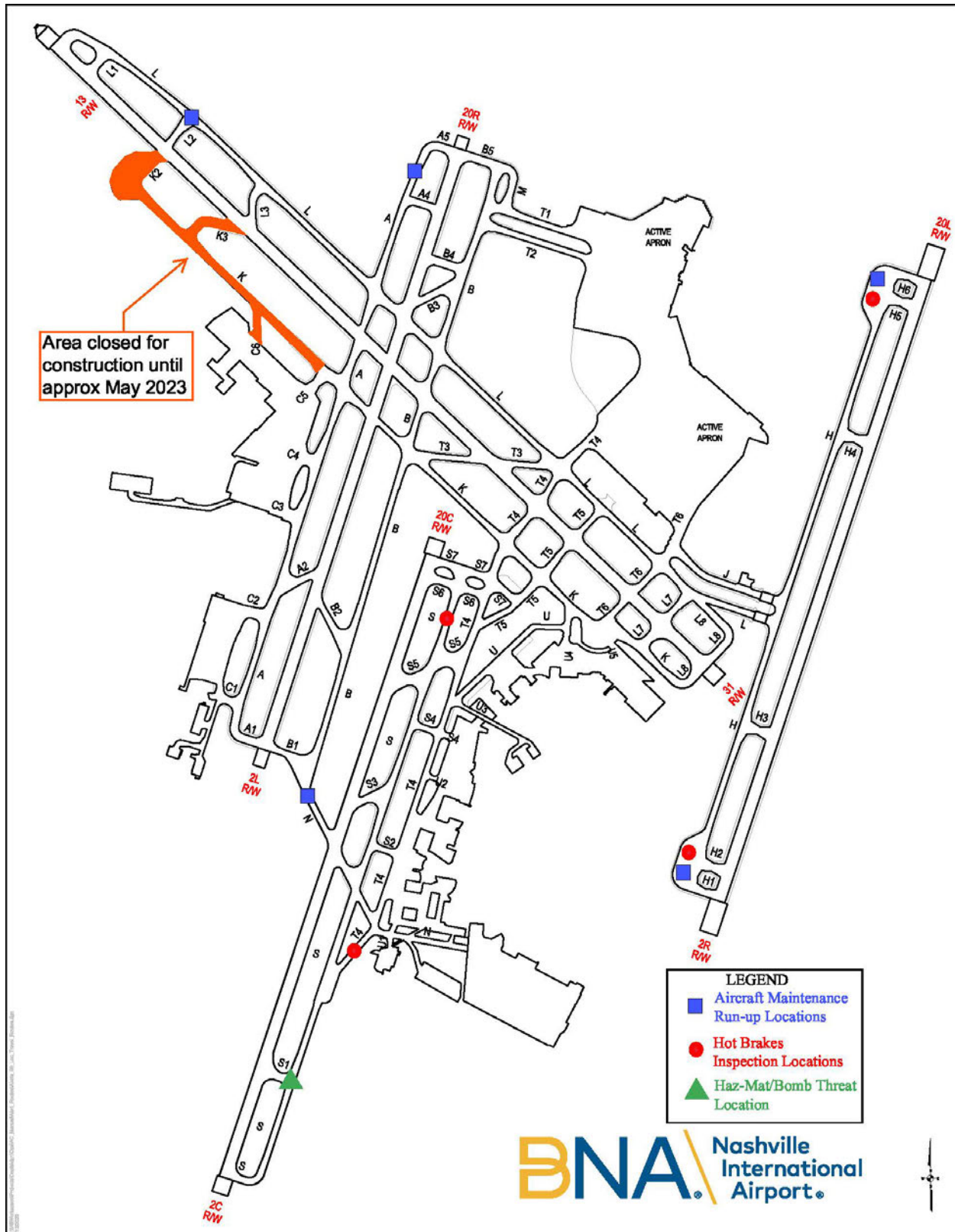
APPENDIX 6-4: ILS LOCALIZER / GLIDE SLOPE CRITICAL AREA

RUNWAY NAVAID CRITICAL AREA Nashville International Airport (BNA)



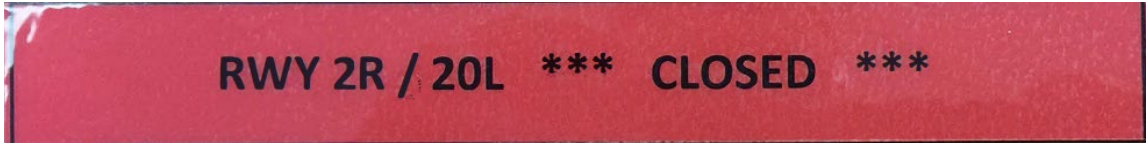
10/20/2020
N:\BNA\NAVAID\Projects\BNA\NAVAID_CriticalAreas - BNA.dgn

APPENDIX 6-5: HOT BRAKE / RUN UP / BOMB THREAT SPOTS

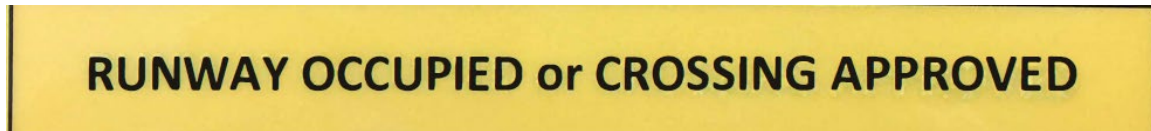


APPENDIX 6-6: TOWER MEMORY AIDES

RUNWAY CLOSED MEMORY JOGGER STRIP



RUNWAY OCCUPIED or CROSSING APPROVED MEMORY JOGGER STRIP



RUNWAY STATUS BOARD

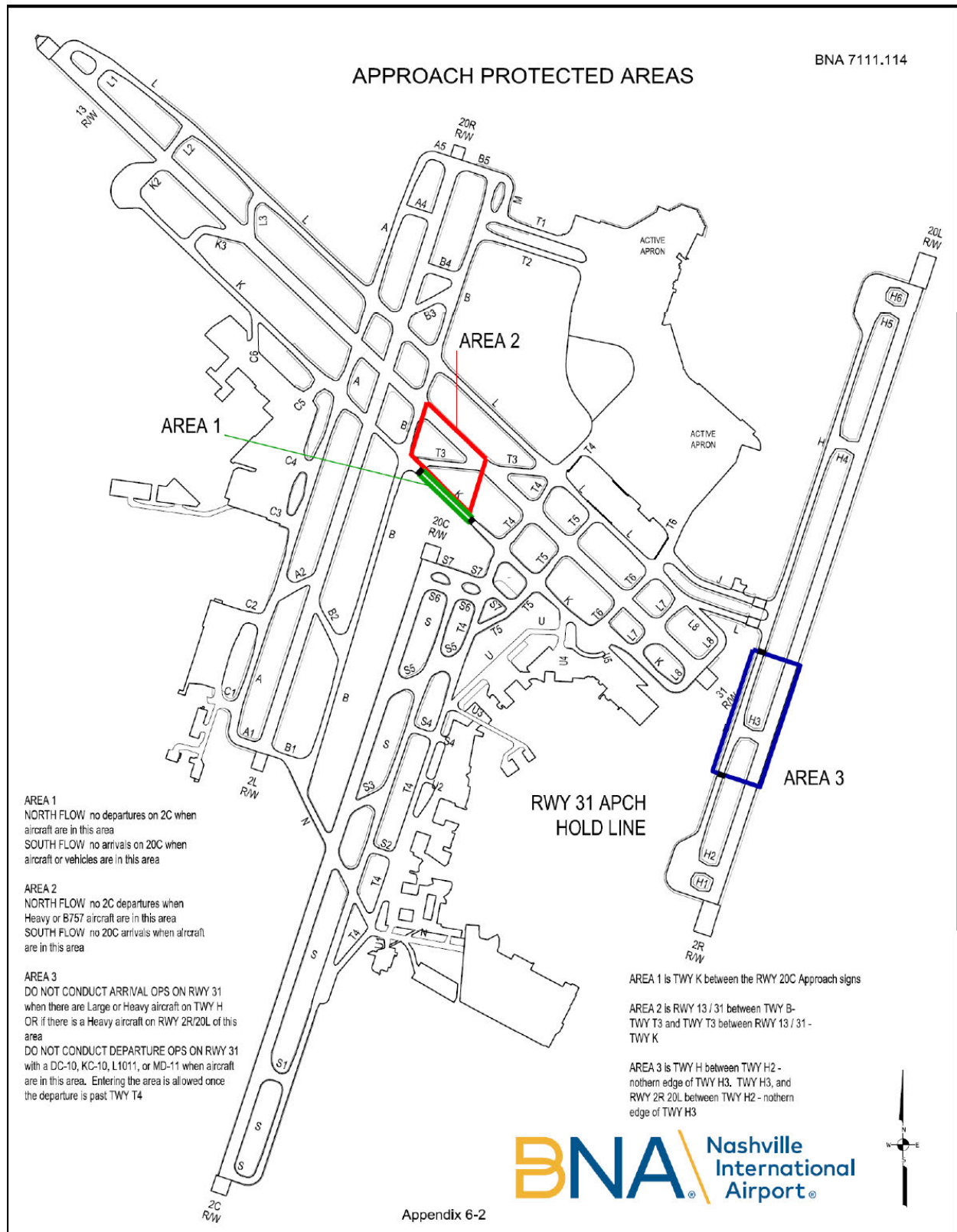
LOCAL CONTROL 1



GROUND CONTROL

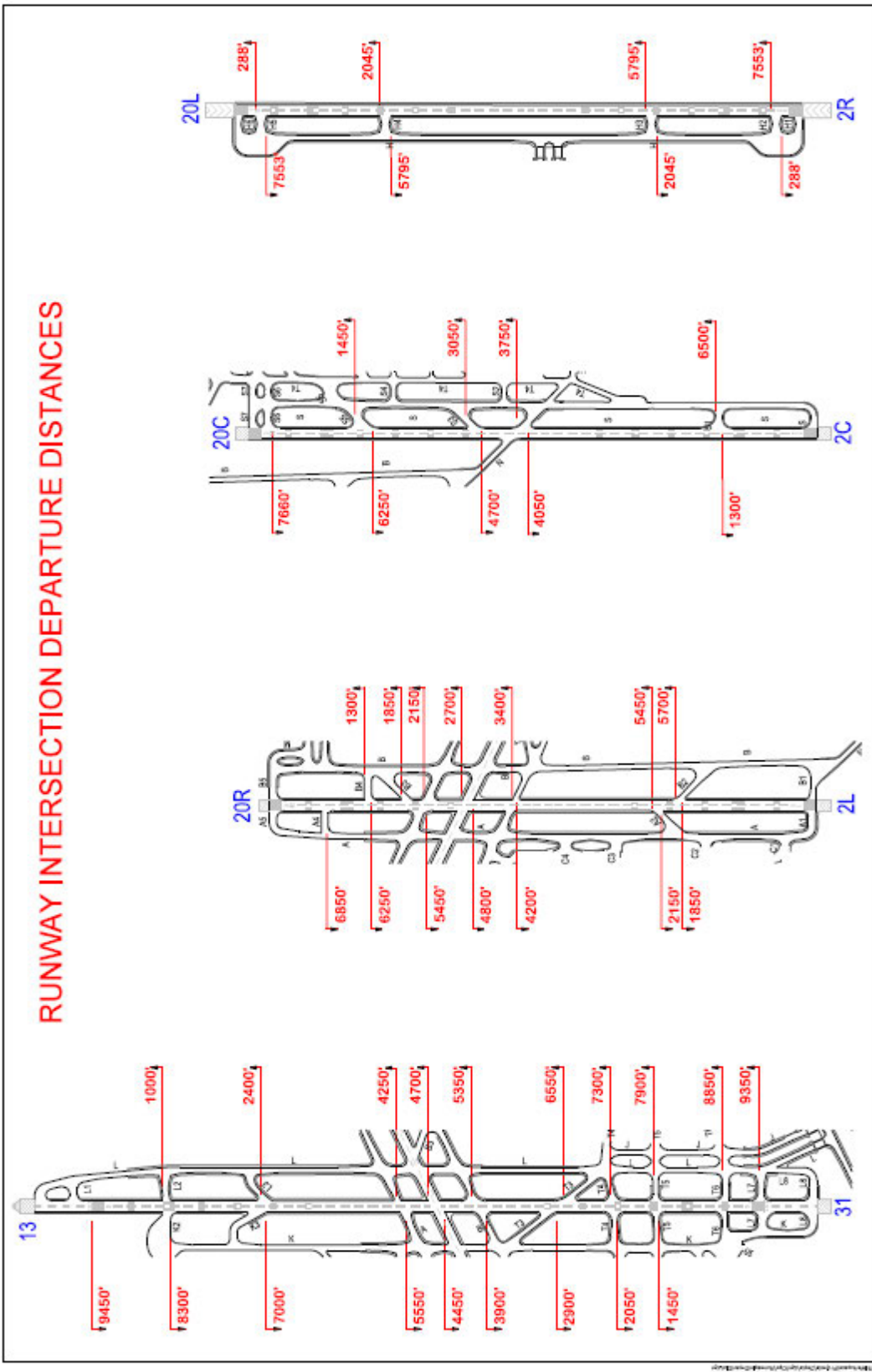


APPENDIX 6-7. RUNWAY 2C/20C/31 APPROACH / DEPARTURE AREAS

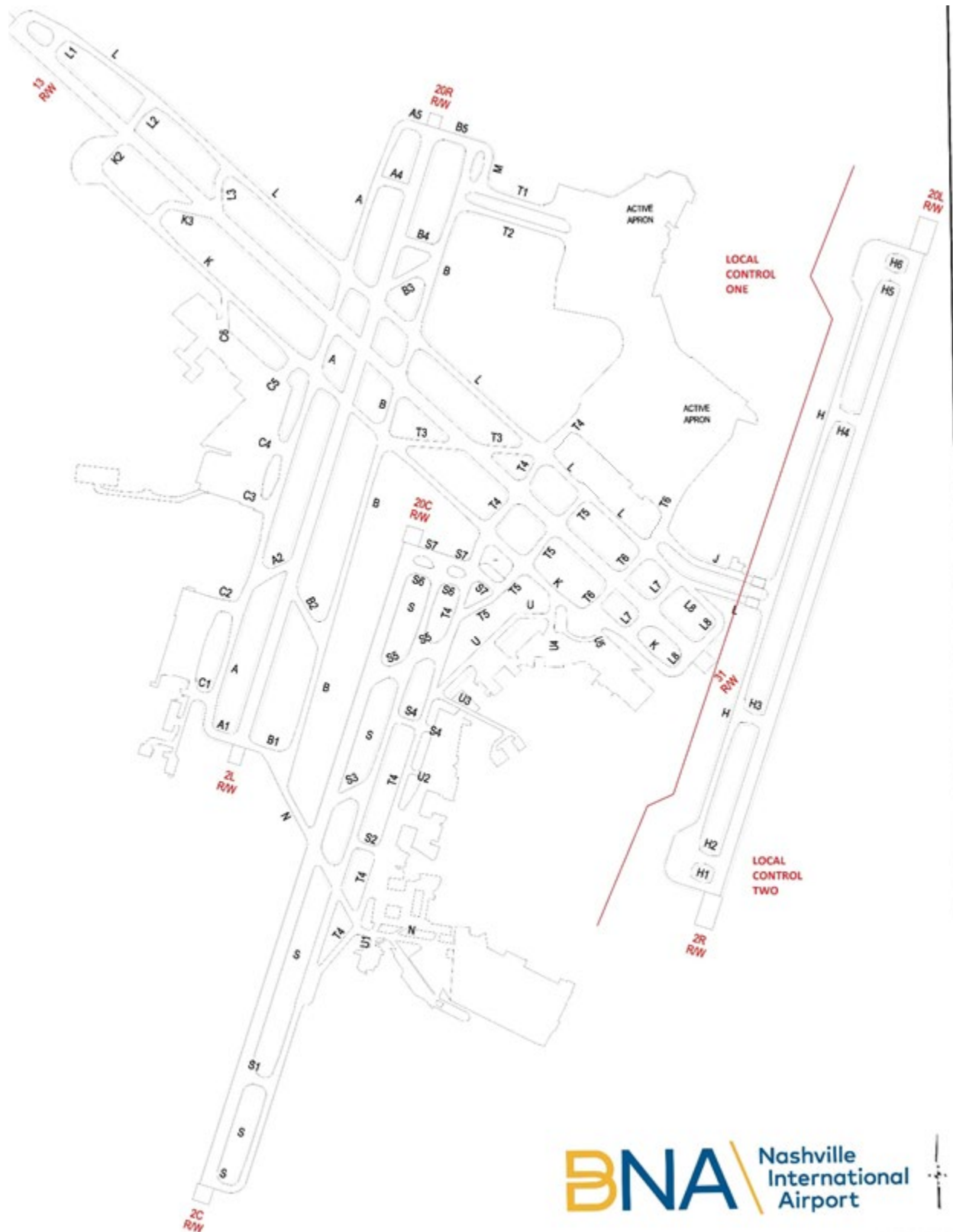


APPENDIX 6-8: INTERSECTION DEPARTURE DISTANCES

RUNWAY INTERSECTION DEPARTURE DISTANCES



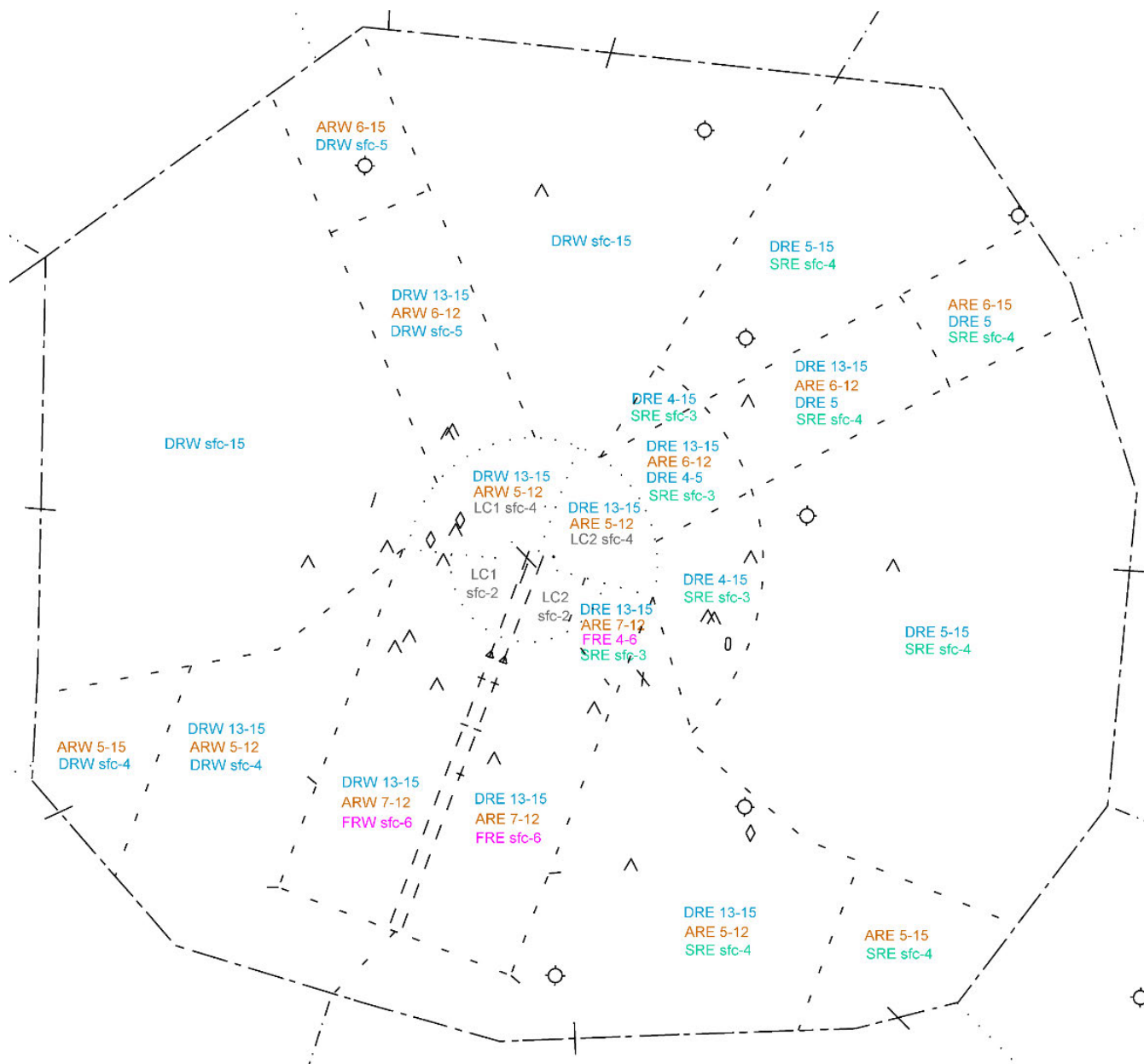
APPENDIX 7: LOCAL AIRSPACE



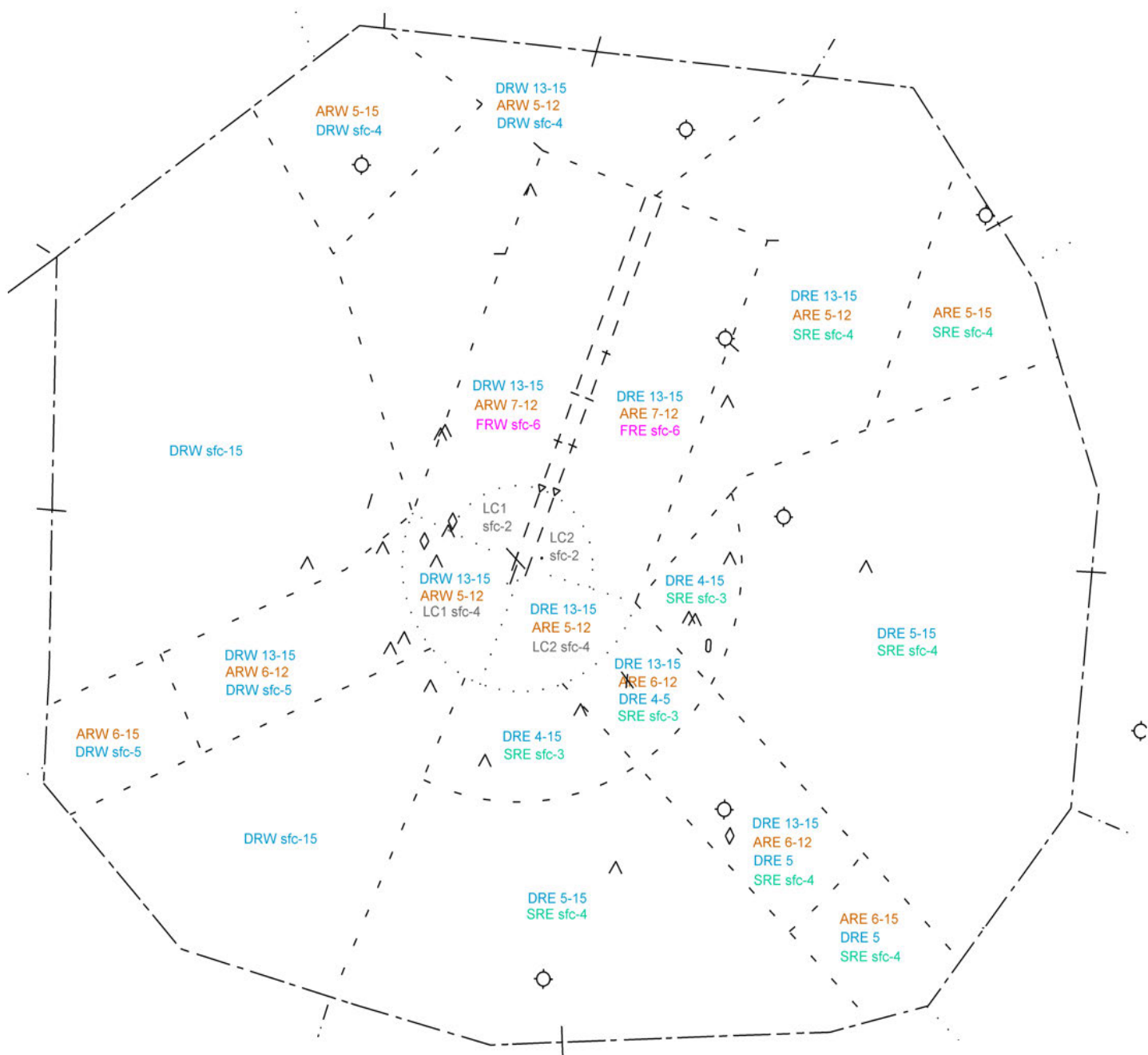
APPENDIX 8: (RESERVED FOR FUTURE USE)

APPENDIX 9: TRACON

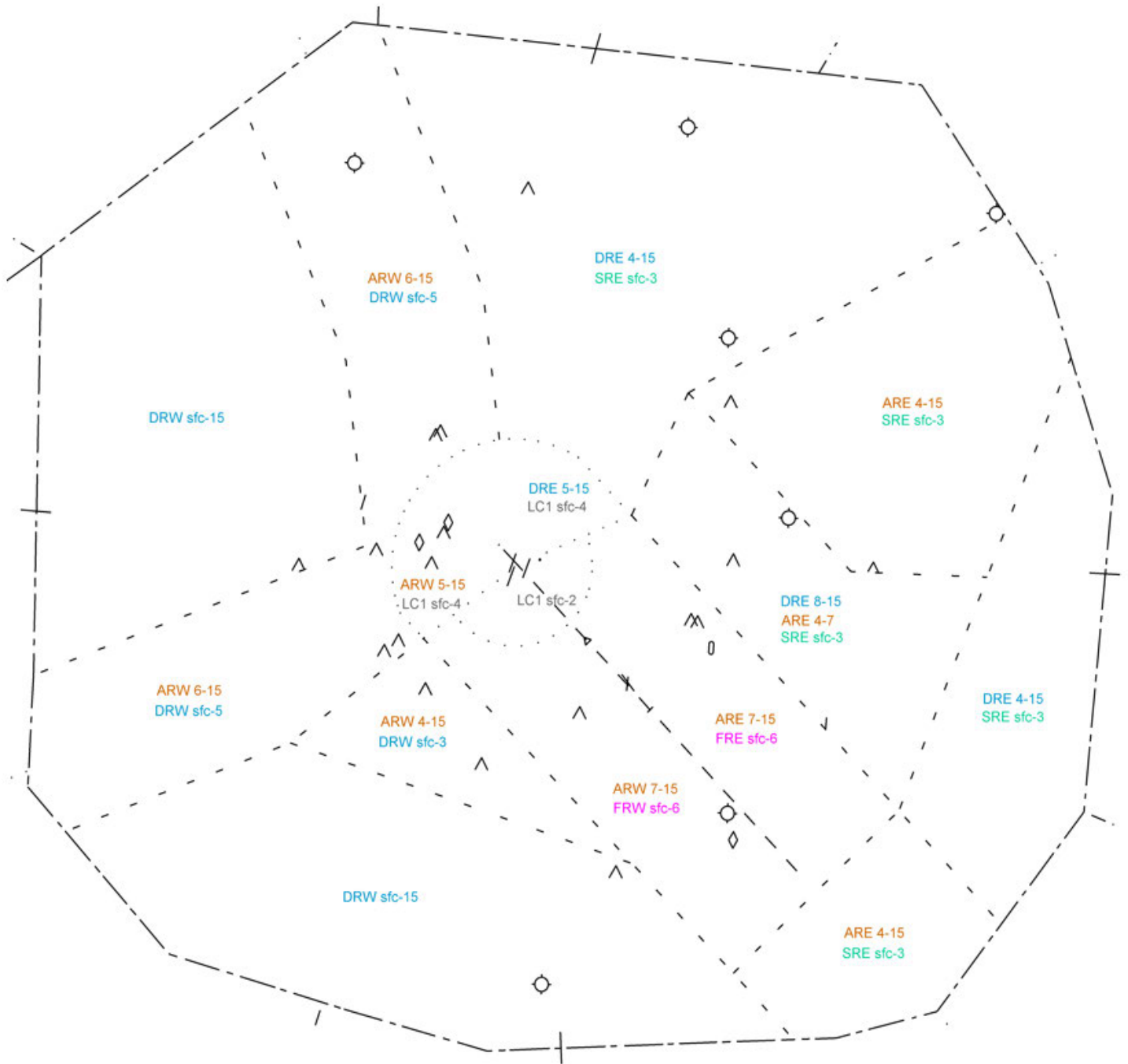
RUNWAY 2



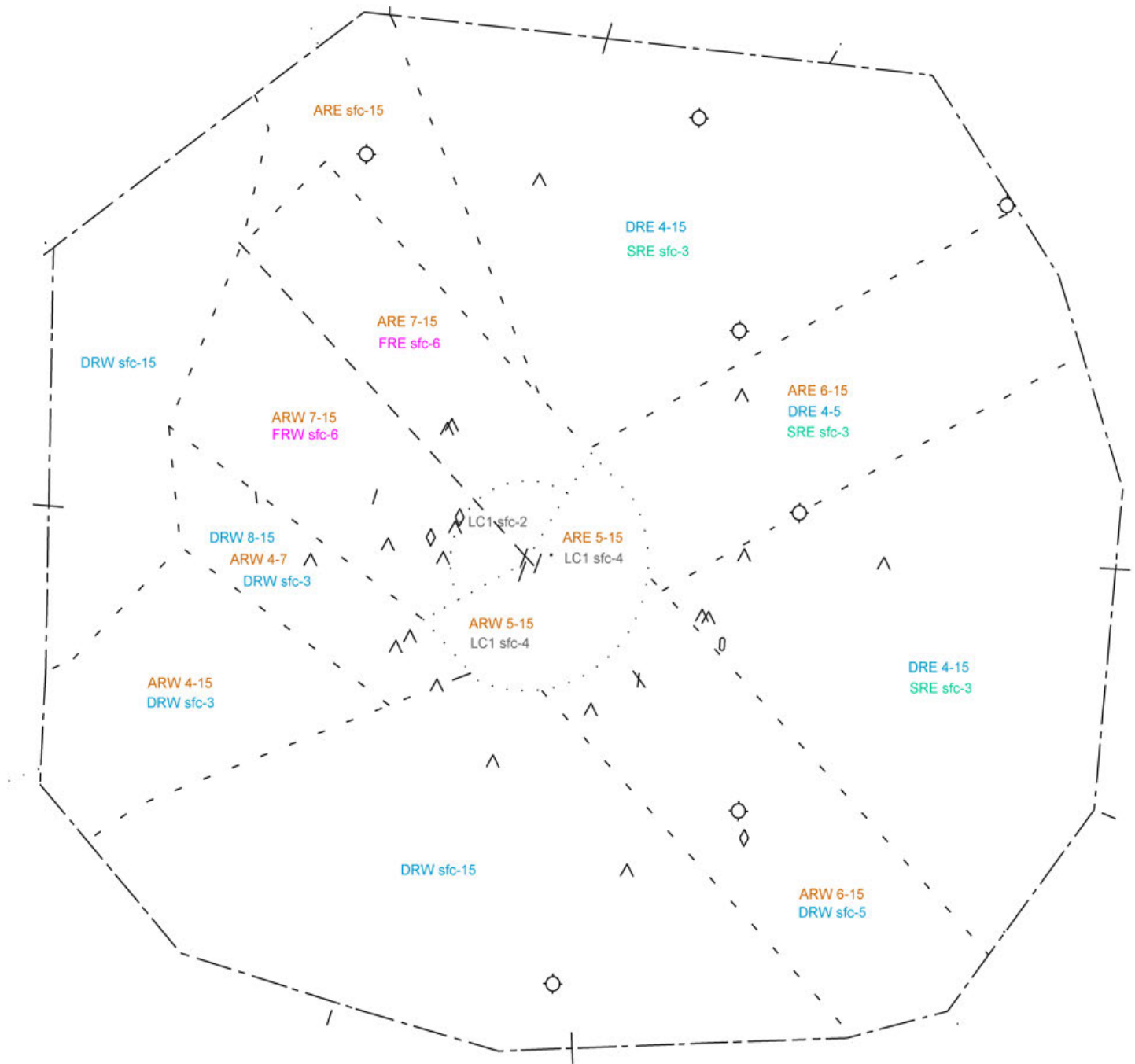
AIR TRAFFIC CONTROL
ATTACHMENT 5



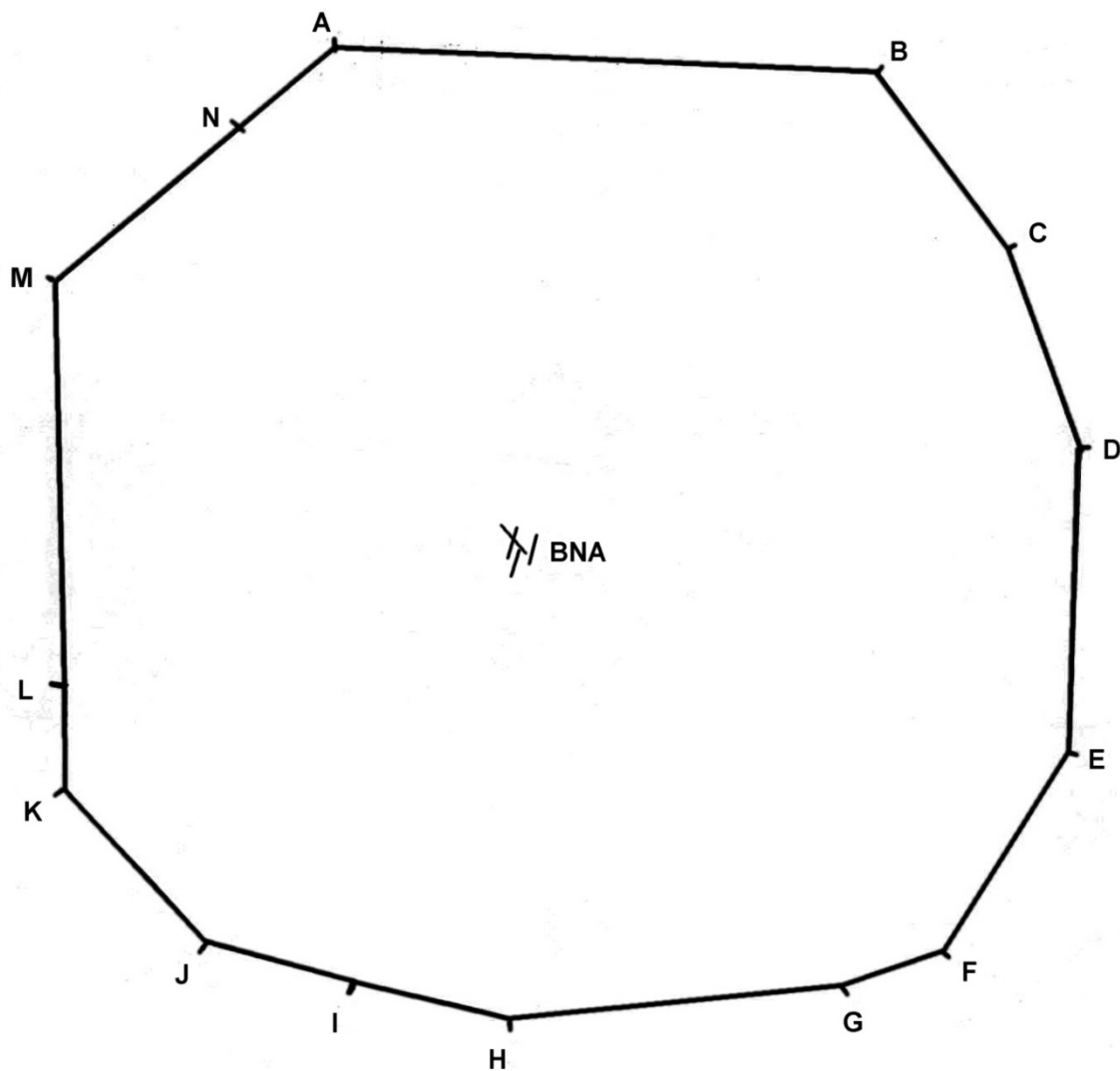
RUNWAY 31



RUNWAY 13



OUTER BOUNDRIES



NARRATIVE DESCRPTION OF LATERAL BOUNDARY OF ZME/BNA AIRSPACE

From	A	N36 41 00	W086 56 00	to
	B	N36 39 00	W086 10 00	to
	C	N36 27 00	W085 59 00	to
	D	N36 14 00	W085 53 00	to
	E	N35 54 00	W085 54 00	to
	F	N35 41 00	W086 05 00	to
	G	N35 39 00	W086 13 00	to
	H	N35 37 00	W086 41 00	to
	I	N35 39 00	W086 52 00	to
	J	N35 42 00	W087 07 00	to
	K	N35 52 00	W087 19 00	to
	L	N35 59 00	W087 19 00	to
	M	N36 25 20	W087 20 05	to
	N	N36 37 30	W087 01 00	to
	A	POINT OF BEGINNING		

APPENDIX 10: ARRIVAL RADAR WEST/EAST

APPENDIX 10-1: ARW Opening Checklist

ARW Frequency: 120.6

During North Operations 02C-02R ILS with ARW: F16 B2CA and F16 ARRN

During North Operations 02L-02R ILS with ARW: F16 B2LA and F16 ARRN

During South Operations 20L-20R ILS with ARW: F16 B20A and F16 ARRS

- Notify ARW is open and reminder of ARW frequency:
 - ZME - they may ask for clarification if 'W' scope is open
 - HOP- specify ARW and BNA North/South Configuration
 - BNA Tower in-charge
 - BNA TRACON team
- STARS Configuration: Check with open positions before reconfiguring then use STARS Configuration List in NIDS.
- Once Configured, ARW must call position ARW was combined with for briefing.
- Ensure 120.6 is keyed up on the ETVS, and no other position has it keyed up.

APPENDIX 10-2: ARW Closing Checklist

- Notify ARW is closing:
 - ZME - they may ask for clarification if 'W' scope is closed
 - HOP- specify ARW
 - BNA Tower in-charge
 - BNA TRACON team
- Reconfigure STARS just before closing ARW.
- Brief appropriate open TRACON positions.

APPENDIX 10-3: ARE Opening Checklist

ARE Frequency: 127.17

During North Operations 02C-02R ILS with ARE: F16 B2CA and F16 ARRN

During North Operations 02L-02R ILS with ARE: F16 B2LA and F16 ARRN

During South Operations 20L-20R ILS with ARE: F16 B20A and F16 ARRS

- Notify ARE is open and reminder of ARE frequency:
 - ZME - they may ask for clarification if 'E' scope is open
 - HOP- (if combined with ARW) specify ARE and BNA North/South Configuration
 - BNA Tower in-charge
 - BNA TRACON team
- STARS Configuration: Check with open positions before reconfiguring then use STARS Configuration List in NIDS.
- Once Configured, ARE must call position ARE was combined with for briefing.
- Ensure 127.17 is keyed up on the ETVS, and no other position has it keyed up.

APPENDIX 10-4: ARE Closing Checklist

- Notify ARE is closing:
 - ZME - they may ask for clarification if 'E' scope is closed
 - HOP- (if combined with ARW) specify ARE
 - BNA Tower in-charge
 - BNA TRACON team
- Reconfigure STARS just before closing ARE.
- Brief appropriate open TRACON positions.

APPENDIX 11: (RESERVED FOR FUTURE USE)

APPENDIX 12: (RESERVED FOR FUTURE USE)

APPENDIX 13: SATELLITE

APPENDIX 13-1: SRE Opening Checklist

SRE Frequency: 128.75

During North Operations 02C-02R ILS with SRE: F16 B2CS

During North Operations 02L-02R ILS with SRE: F16 B2LS

During South Operations 20L-20R ILS with SRE: F16 B20S

- Notify SRE is open and reminder of SRE frequency:
 - ZME Area 5 (BWG, SYI, BNA)
 - MQY Tower
 - BNA Tower in-charge
 - BNA TRACON team
- STARS Configuration: Check with open positions before reconfiguring then use STARS Configuration List in NIDS.
- Once Configured, SRE must call position SRE was combined to for briefing.
- Ensure 128.75 is keyed up on the ETVS, and no other position has it keyed up.

APPENDIX 13-2: SRE Closing Checklist

- Notify SRE is closing:
 - ZME Area 5 (SYI, BWG, BNA)
 - MQY Tower
 - BNA Tower in-charge
 - BNA TRACON team
- Reconfigure STARS just before closing SRE.
- Brief appropriate open TRACON positions.

APPENDIX 14: WEST/EAST RADAR ASSOCIATE (AD / DD)

APPENDIX 14-1: AD/DD Opening Checklist

- Notify the following, AD and/or DD is open:
 - BNA Tower in-charge
 - BNA TRACON team
- Coupling keyboards (*enter commands from AD/DD keyboards*)
 - **AD Position:** AD (TCW #1, 1G) keyboard to DRW (TCW #2, 1X)
 - First, combine 1G airspace to 1X.
 - MULTI FUNC C, 1X, 1G+ <ENTER>
 - Second, couple keyboards
 - MULTI FUNC C, Δ, *, P, 1X <ENTER>
 - **DD Position:** DD (TCW #4, 1J) keyboard to DRE (TCW #3, 1Y)
 - First, combine 1J airspace to 1Y.
 - MULTI FUNC C, 1Y, 1J+ <ENTER>
 - Second, couple keyboards
 - MULTI FUNC C, Δ, *, P, 1Y <ENTER>
- *NOTE: If a STARS Configuration change is required while either AD and/or DD are open, "OK" must be added to end of STARS Configuration change syntax.*
 - *Example: F16, C, O, 3 [SPACE] OK <ENTER>*
 - *Additionally, coupling keyboard steps must be re-entered.*
- Ensure radar position frequency monitoring
 - AD monitors DRW
 - DD monitors DRE

Note: Enhanced functionality with keyboard coupling:

- "OK" not required for scratchpad changes or hand offs
- Initiate point-outs (PO) as normal, except PO in progress or completed will not display on AD or DD scope. Displays only on DRW, DRE and scopes where PO was accepted.
- VFR pop up flight plans don't require 1X or 1Y at end.
- Leader line changes and preview area at AD or DD position will NOT display on DRW or DRE.

APPENDIX 14-2: AD/DD Closing Checklist

- Notify the following, AD and/or DD is closed:
 - BNA Tower in-charge
 - BNA TRACON team
- Unkey radar position frequency monitoring.
- Decoupling keyboards (*enter commands from AD/DD keyboards*)
 - **AD Position:** AD (TCW #1, 1G) keyboard from DRW (TCW #2, 1X)
 - First, decouple keyboards
 - MULTI FUNC C, Δ, *, C, 1X <ENTER>
 - Second, dissociate 1G airspace from 1X.
 - MULTI FUNC C, 1G, 1G <ENTER>
 - **DD Position:** DD (TCW #4, 1J) keyboard from DRE (TCW #3, 1Y)
 - First, decouple keyboards
 - MULTI FUNC C, Δ, *, C, 1Y <ENTER>
 - Second, dissociate 1J airspace from 1Y.
 - MULTI FUNC C, 1J, 1J <ENTER>

APPENDIX 15: (RESERVED FOR FUTURE USE)

APPENDIX 16: (RESERVED FOR FUTURE USE)

Appendix 17: BNA Standardized Runway Operations

BNA STANDARDIZED RUNWAY OPERATIONS

NOTE: *These operations do not apply during Nighttime Operations outlined in Order 7232.38-Appendix 2 or during CAT II and III Operations or to Group V aircraft, which must be handled IAW MNAA LOA.*

I. During Normal Airfield Configuration (no closures):

A. South Operations:

- Arrive -
 - RWY 20L and RWY 20R
 - Exception – Pilot request for RWY 20C. Aircraft may be pre-coordinated by TRACON to land RWY 20C for operational necessity, such as volume-based offload from the arrival sequence, or operational priority, such as MEDIVAC.
 - If not pre-coordinated, TRACON will put RRC or LRC in the data-block scratchpad (initial runway assigned IAW BNA SOP). The tag will then be flashed to LC to highlight the request and to allow LC to make the appropriate scratchpad changes. LC1 can change aircraft to RWY 20C if no impact to operational safety or efficiency. LC1 should not change the aircraft to RWY 20C closer than 4NM from the airfield due to terminal-area obstructions (cranes).
 - Depart RWY 20C: South concourse & GA A/C
 - Depart RWY 20R: North concourse A/C
 - SC request “gaps” when needed for departures on RWY 20R

B. North Operations:

- Arrive -
 - RWY 2R
 - RWY 2C
 - Exception – Pilot request for RWY 2L. Aircraft may be pre-coordinated by TRACON to land RWY 2L for operational necessity.
 - If not pre-coordinated, TRACON will put CRL in the data-block scratchpad. The tag will then be flashed to LC to highlight the request and to allow LC to make the appropriate scratchpad changes. LC1 can change to RWY 2L if no impact to operational safety or efficiency.
- Depart -
 - RWY 2L with westbound traffic
 - RWY 2R with eastbound traffic
 - SC request “gaps” when needed for departures on RWY 2R
 - GC must coordinate with LC for non-standard departure runway

usage prior to taxi. This operation must be coordinated with the DRE/DRW through the scanned departure strip.

II. During a RWY 02L/20R Closure:

A. South Operations:

- Arrive -
 - RWY 20L
 - Exception –Pilot request for RWY 20C. Aircraft may be pre-coordinated by TRACON to land RWY 20C for operational necessity, such as volume-based offload from the arrival sequence, or operational priority, such as MEDIVAC.
 - If not pre-coordinated, TRACON may put LRC in the data-block scratchpad and the tag will then be flashed to LC to highlight the request and to allow LC to make the appropriate scratchpad changes. LC1 can change the aircraft to RWY 20C if no impact to operational safety or efficiency. LC1 should not change the aircraft to RWY 20C closer than 4NM from the airfield due to terminal-area obstructions (cranes).
- Depart -
 - RWY 20C

B. North Operations:

- Arrive -
 - RWY 2C with GA
 - RWY 2R with Air Carriers to the extent practicable.
- Depart -
 - RWY 31
 - If RWY 31 is unavailable for a short-term situation, the WS must determine a plan/procedure. For a longer-term outage/closure, ATM/FACREP/LSC will develop appropriate procedures.

III. During a RWY 02R/20L closure:

A. South Operations:

- Arrive -
 - RWY 20R
 - Exception – Pilot request for RWY 20C. Aircraft may be pre-coordinated by TRACON to land RWY 20C for operational necessity, such as volume-based offload from the arrival sequence, or operational priority, such as MEDIVAC.
 - If not pre-coordinated, TRACON will put RRC in the data-block scratchpad and the tag will then be flashed to LC to highlight the

request and to allow LC to make the appropriate scratchpad changes. LC1 can change the aircraft to RWY 20C if no impact to operational safety or efficiency.

- Depart -
 - RWY 20C: South concourse & GA A/C
 - RWY 20R: North concourse A/C
 - SC request “gaps” when needed for departures

B. North Operations (Not Applicable during CAT II/III Operations):

- Arrive -
 - RWY 02C
 - Exception – Pilot request for RWY 2L. Aircraft may be pre-coordinated by TRACON to land RWY 2L for operational necessity.
 - If not pre-coordinated, TRACON will put CRL in the data-block scratchpad and the tag will then be flashed to LC to highlight the request and to allow LC to make the appropriate scratchpad changes. LC1 can change to RWY 2L if no impact to operational safety or efficiency.
- Depart -
 - RWY 2L
 - GC must coordinate with LC for non-standard departure runway usage prior to taxi. This operation must be coordinated with the DRE/DRW through the scanned departure strip.

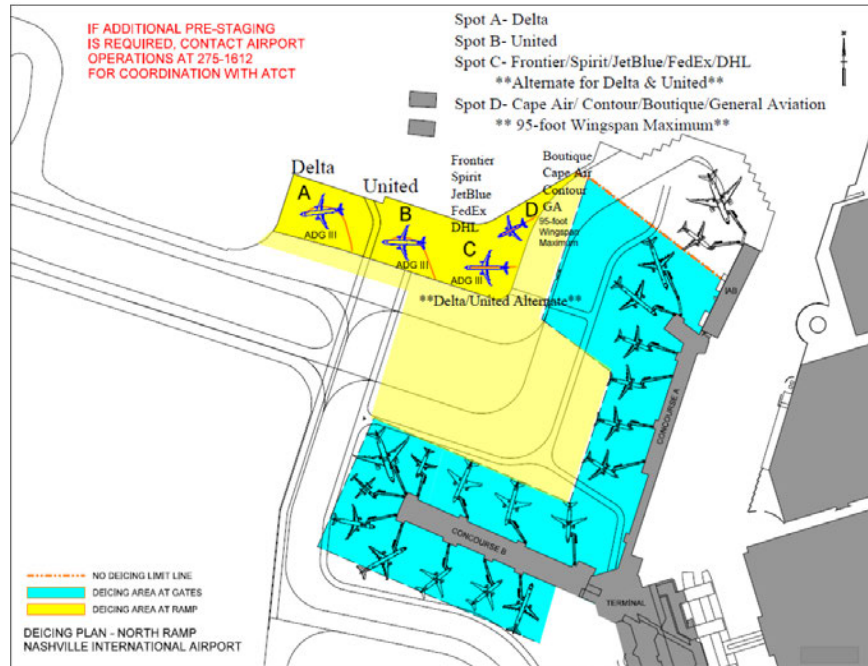
IV. The memory aid for the ‘RWY 2C/20C ARR/DEP AREA’ (Areas 1&2) must be utilized between LC and GC to reflect ownership. GC must primarily have ownership, unless requested by LC to land RWY 20C or depart RWY 2C.

NOTE: The memory aid only applies to operations that impede arrivals and departures. For example, in a North Operation when LC owns the Approach/Departure Areas, GC may move vehicles in Area 1 without coordination. Also while in a North Operation, GC may taxi through Area 2 without coordination (exception: B757 and Heavy Aircraft)

APPENDIX 18: (RESERVED FOR FUTURE USE)

APPENDIX 19: DEICING LOCATIONS

North Terminal Ramp Deicing Locations



South Terminal Ramp Deicing Locations

At the gate

Or

At alternate locations determined by MNAA

APPENDIX 20: (RESERVED FOR FUTURE USE)

APPENDIX 22-1: SCRATCHPAD ENTRIES

22-1-1. SCRATCHPAD ENTRIES

The following entries have been developed to relay common information amongst sectors using the scratchpad section of the stars full data block. The characters, slew and enter will result in the locally defined data being displayed in the appropriate field of the data block.

To make entry into scratchpad 1, type any two or three number/letter combination on the STARS keyboard, then slew and enter over a data block.

To make entry into scratchpad 2, type [+] and any 2 or three number/letter combination on the STARS keyboard, then slew and enter over data block.

If an aircraft landing BNA is issued an altitude clearance other than "Descend Via" or the altitude defined in SOP Chapter 10-2 or 10-3, the altitude must be entered into the data block (using '+###, SLEW, enter').

22-1-2 BNA ARRIVALS

For IFR BNA Arrivals scratchpad 1 will indicate the type of approach, pilot applied visual separation (if applicable) and runway assignment. For VFR aircraft, enter the runway assignment in scratchpad 1. (e.g. 20L) Scratchpad 2 will indicate the intention of a missed approach or overhead maneuver and the sector for the aircraft to return to.

Using the information from Tables A22-1-1 and A22-1-2 controllers must formulate the appropriate scratchpad entries for BNA arrivals. Making the appropriate scratchpad entry should be done as an indication that communications have been established and BNA ATIS has been received.

TABLE A22-1-1
BNA Scratch Pad 1 Entries

1 st	Type Approach	2 nd	If applicable	2 nd /3 rd	Runway
V	Visual	S	Visual separation	L	Left
I	ILS	R	Requesting	C	Center
Z	RNAV-Z			R	Right
N	RNAV-V			1	31
G	RNAV-Y/RNAV (GPS)			3	13
L	Localizer				

EXAMPLES-

- ILS to Runway 31: **11**
- RNAV-Z to Runway 2 Left: **ZL**
- RNAV-V to Runway 2R with pilot applied visual separation: **NSR**

TABLE A22-1-2
BNA Scratch Pad 2 Entries

+ Scratchpad			
1st	Type Landing	2nd	Next Sector
TG	Touch and Go	Y	DRE
OP	Option	X	DRW
LA	Low Approach	S	SRE
TB	Full Stop-Taxi Back	T	Tower
OH	Overhead	F	FRE
		W	ARW
		E	ARE

EXAMPLES-

- *VFR option 20R, departing to the east, talking to DRE: 20R, +OPY*
- *ILS 20R, Low approach, departing to the East, Talking to SRE: IR, +LAS*

Aircraft requesting a departure only runway must have the assigned runway “R” and requested runway placed in scratchpad 2. (e.g. RRC). The tag will then be handed off to the tower. LC will then approve or deny the request on check-in and modify the tag accordingly.

VFR BNA arrivals using visual separation from preceding or parallel runway traffic must be entered in scratchpad 1 as S (separation) and the runway. (e.g. VFR 20R, visual separation SR)

The scratchpad entries may change multiple times for one aircraft before arriving at BNA. An example for this would be in a north configuration visual approaches advertised, the ARW controller has an aircraft request runway 2R. The ARW controller would enter VRR. When FRW approves the requested runway they would enter VR. Finally when issuing the approach clearance, FRW uses visual separation from the preceding aircraft and would then enter VSR.

22-1-3 SATELLITE ARRIVALS

Scratch pad entries or strip marking as outlined in Appendix 22-1-1 is required. Strip marking as outlined in Chapter 9-4 is required for satellite departures, and for satellite arrivals UNLESS STARs scratchpad entries are utilized. Strip marking is required when the facility is in ATC Alert due to radar limitations.

For All Satellite arrivals, scratchpad 1 will be the 3 character identifier for the landing airport. Scratchpad 2 will indicate the type of approach, runway and missed approach intent.

Using the information from Table A22-1-3, controllers must formulate the appropriate scratchpad entries for all satellite arrivals. Making the appropriate scratchpad entry should be done after aircraft check in as an indication that communications have been established.

TABLE A22-1-3
Satellite Arrival Scratch Pad 2 Entries

+ Scratchpad					
1 st	Type Approach	2 nd	Approach Runway	3 rd	Miscellaneous
I	ILS	#	2 nd digit of the runway	M	Missed approach
G	RNAV/GPS			C	Circling
U	VOR				
V	Visual				
L	Localizer				
B	NDB				

Examples-

- An ILS 20, Full stop at JWN: JWN/+I0
- An RNAV 18, missed approach at MBT: MBT/+G8M

22-1-4 SPECIAL CONDITION CODES

The following are approved Special Condition codes. Condition codes will appear in either yellow or red letters on top of the full data block and will display the full data block on all internal workstations.

Activation or deactivation of a special condition code must be performed by track owner on an associated track: enter the condition code, SLEW <ENTER>.

Primary Special Condition codes (red):

- EM = Emergency
- HJ = Hijack
- RF = Radio Failure
- LL = Lost Link

Secondary Special Condition codes (yellow):

- MI = Military Intercept
- ME = Medical Emergency*
- MF = Minimum Fuel*
- OD = Opposite Direction*
- IN = JWN Inbound arrival coordinated*

**Site adapted*

22-1-5 OVERFLIGHTS

For all overflights landing at airports covered by an existing LOA with either ZME or HOP, enter the 3 letter identifier of the destination airport in scratchpad 2.

22-1-6 MISCELANEOUS ENTRIES

The following are approved scratchpad 1 entries that may be used for VFR aircraft.

All 3-letter airport identifiers.

ANG = National Guard Ramp

AT = Atlantic FBO

PIX = Aerial Photography

BTW = Brentwood

CEN = Centennial Hospital

COO = Cool Springs Mall area

DTN = Downtown

EPA = East Practice Area

FKN = Franklin

H(##) = Hangar (hangar number), i.e. H12

PPD = J. Percy Priest Dam

JFA = Just flying around

LEP = Law Enforcement Patrol

MAN = Maneuvering

MET = Metro Center

OHD = Old Hickory Dam

PLP = Pipeline Patrol

SID = Sidco (Army National Guard)

SIG = Signature Ramp

SKY = Skyline

SHL = Southern Hills

STW = St. Thomas West

STM = St. Thomas Midtown

STR = St. Thomas Rutherford

SUM = Summit Hospital

BD = Highway Patrol Station (Bear's Den)

VDY = Vanderbilt Hospital

APPENDIX 22-2: STARS

STANDARD TERMINAL AUTOMATION REPLACEMENT SYSTEM (STARS)

This appendix augments and complements the STARS FSL TCW/TDW Quick Reference Cards.

APPENDIX 22-2-1. KEYBOARD ENTRIES

STARS LISTS

MULTIFUNCTION:

COAST SUSPEND	TC
DUPLICATE DEPT ACID	TZ
FLIGHT PLAN (TAB)	T
HOSPITAL	TH
LA/CA/MCI	TM
RESTRICTIONS AREAS	TRA
SIGN ON	TS
TIME OUT WARNING	TOW
VEHICLE ON RUNWAY	PV
VFR	TV
BNA COORDINATION LIST	PBNA
MQY COORDINATION LIST	PMQY
ADS-B SITES	TG

TRAFFIC MANAGEMENT LIST

PASLY ARVL GATES	PL1
SWFFT ARVL GATES	PL2
RYYMN ARVL GATES	PL3
CHSNE ARVL GATES	PL4

CONFIGURATIONS

Configuration 1:	All TRACON positions combined to DRW
Configuration 2:	North Parallel Runways – DRW, DRE, [1 Final]
Configuration 3:	Not in use
Configuration 4:	North Parallel Runways – All positions split
Configuration 5:	South Parallel Runways – DRW, DRE [1 Final]
Configuration 6:	Not in use
Configuration 7:	South Parallel Runways – All positions split
Configuration 8:	Runway 31 – DRW, DRE, [1 Final]
Configuration 9:	Runway 31 – All positions split
Configuration 10:	Runway 13 – All positions split
Configuration 11:	All TRACON positions combined at GC
Configuration 12:	All TRACON positions combined at LC

APPENDIX 22-2-2. MISCELLANEOUS INFORMATION

TCW/TDW IDs WITH AIRSPACE				TCW/TDW IDs WITHOUT AIRSPACE	
ARE	1E	ARW	1W	FMW	1K
DRE	1Y	DRW	1X	CI2	1U
FRE	1F	FRW	1B	CD	1I
SRE	1S	SRW	1G		
FME	1J	MQY	1M		
LC1	1T	GC2	1L		

POSITION IDs WITHOUT AIRSPACE			
GC1	G1	ARRIVAL DATA	AD
LC2	L2	DEPARTURE DATA	DD
CC1	C1	TOWER SUP	SC
CC2	C2	TRACON SUP	SI
CI1	AC		

ATAs		DTAs							
		Gate Name	1 Ltr	Conv. ID	RNAV ID	Gate Name	1 Ltr	Conv. ID	RNAV ID
CHS	G	KRSTA	K	KRS	CER	PREDs	P	PRE	
PAS	U	GDOGG	G	GDO	KNN	CHADM	C	CDM	OZC
RYY	W	HGGRD	H	HGG	MER	TAZMO	Z	TZM	SAA
SWF	V	PARDN	A	PAR	KEL	EVVAN	E	EVN	CHP
		DANLS	D	DAN	BGD	TIPPN	T	TIP	ROR
		DRURY	U	DRU	GRC	FLAME	F	FLA	COO
		LAJ	J	LAJ					

- A. Multifunction ZA to test alarm
- B. Final Zone – Area on final where leader line direction will automatically reposition away from the parallel runway. F7, OZ, KEYBOARD ENTER enables and disables this function.
- C. QOJ outage, entry to suppress LRR feed. F7, 2, S, T, E (SPACE), D to disable or E to enable.

- D. STARS Preference Sets. To facilitate standardization of the System Status Area (SSA) the following items are required to be saved in individual PREF Sets and displayed at all times:
- 1) TIME - system time.
 - 2) ALTSG - altimeter setting.
 - 3) GI TEXT FILTER-MAIN – ATIS code, approaches, runways in use.
 - 4) MQY GI TEXT FILTER 1 & 2 – for display of MQY weather/runway in use, etc.
 - 5) STATUS – FSL/DSA capability indicators.
 - 6) PLAN- Configuration in use.
 - 7) RADAR - Radar site being used.
 - 8) SYS OFF - any system wide functionality that has been inhibited (MSAW, CA ZONE, Inter-facility (displayed as HOP), etc.).
 - 9) NAS I/F - NAS link status.
 - 10) OFF IND - any functionality has been inhibited at a particular TDW. (HOPA, HOPI)
- E. Special Codes Displays - Aircraft squawking the following codes will be display a limited data block on all TDW's:
1. CODES - Beacon code sets "12" and "40" shall be entered for display. This field is not required for display in the SSA
 2. Rapidly maneuvering military aircraft not receiving ATC services – 4000

NOTE: See Letters of Agreement for permanent beacon assignment.

F. ATPA Commands

1. To enable or inhibit the four different aspects of ATPA:

From the DCB menu, select Shift, then TPA/ATPA.

2. To hide the ATPA information from the SSA:

From the DCB menu, select SSA filter, then select or deselect "in-trail" or "2.5."

APPENDIX 22-2-3. FORMATS FOR OPERATIONAL REQUIREMENTS

A. Automated Point-outs:

1. Initiating Controller:
 - a) Initiate a Point-out- Receiving TCP, *, SLEW, Enter.
 - b) Recall a point-out – SLEW, ENTER.
2. Receiving Controller:
 - a) Accept a point-out – SLEW, ENTER.
 - b) Reject a point-out – UN, SLEW, Enter.
 - c) Deny the point-out, but accept a handoff - *, *, SLEW, ENTER

NOTE: Automated point-outs are not available in DSA mode.

B. STARS System Area:

1. Enter the ATIS Code: F7, S, (code), keyboard enter

NOTE: Changing the ATIS code will cause the main GSI to blink. Delta key, keyboard enter – acknowledges for the code and stops the blinking.

2. Normally, BNA altimeter setting should automatically update via auto mode.
 - a) Turn on automatic altimeter for BNA: F7, A, BNA, SPACE, A, ENTER
 - b) Enter the altimeter setting manually: F7, S, altimeter, ENTER

NOTE: Changing altimeter manually disables the automatic altimeter updates.

C. Transponder code assignments:

1. Tower /TRACON discreet codes for routine VFR pick-ups: 0401-0464
2. MSAW monitored codes for non-FDIO flight plans requesting IFR flight plan within the Nashville airspace: 0465-0467

NOTE: Any VFR code can be modified for MSAW processing - F7, V, SLEW ENTER

APPENDIX 22-2-4. STARS SIGN ON

A. Signing on a position. The basic entry format is shown below:

SIGN ON- Menu Key with one of the entries below, then keyboard Enter

- (a). OP = Operating initials
- (b). OP/DV = Instructor initials/Trainee initials for training/OJT.

- (c). OP.DV = Instructor initials.Trainee initials for eval/monthly skill checks.
- (d). OP*DV = Instructor initials*Trainee initials for a certification skills check.
- (e). OP+DV = Instructor initials+Trainee initials for monitoring/OJF.
- (f). TTTT – time in hours and minutes – HHMM

NOTE: The time is optional. The STARS time is used if the time is omitted.

B. Signing on a non-keyboard position:

SIGN ON menu key OP, (/OP, .OP, *OP), space, (non-keyboard position), (TTTT) keyboard Enter.

NOTE: Refer to number 2 in this appendix for two-letter non-keyboard position ID.

C. Closing a position:

SIGN ON menu key, *, keyboard Enter.

NOTE: F7, 4 can replace using the Sign On menu key

APPENDIX 23: (RESERVED FOR FUTURE USE)

APPENDIX 24: (RESERVED FOR FUTURE USE)



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

**ORDER
BNA
3120.1B**

Effective Date:
04/16/2021

**Nashville Air Traffic Control
Tower Policy**

SUBJ: Nashville ATCT/TRACON (BNA) Training Program

This order prescribes the Training Program and practices at Nashville Air Traffic Control Tower. It is to be used in conjunction with the national Air Traffic Technical Training order, JO 3120.4. All air traffic personnel are required to be familiar with the provisions of this order that pertain to their operational responsibilities.

[Redacted]
[Redacted]
Date: 2021.04.01
13:01:09 -05'00'

Ray Cummins
Air Traffic Manager
Nashville Air Traffic Control Tower/TRACON

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N BNA 3120.107

Nashville Air Traffic Control Tower

Effective Date:
February 15, 2024

SUBJ: CHANGE TO TRAINING ORDER

- 1. Purpose of this Notice.** The purpose of this Notice is to make changes to the BNA TRAINING ORDER, BNA 3120.1B.
- 2. Audience.** This notice applies to all Nashville ATCT personnel.
- 3. Where Can I Find This Notice.** This Notice can be found on the Federal Directives Repository.
- 4. Background.** This Notice amends BNA 3120.1B, Appendix A, Annual Refresher Training to include requirements from National Training Order and Appendix B, Allotted Training Hours. LC2 has been redesigned and will be opening as a separate position requiring a change to the training hours for both LC1 and LC2. Additionally, in the previous version, allowing for AD/DD to be combined while providing OJT was inadvertently omitted.
- 5. Procedures.** Make corrections to all paper and electronic copies of the BNA 3120.1B and upload the Notice to the Federal Directives Repository.

Replace Appendix A, Annual Training Program

Replace Appendix B, Allotted Training Time.

Signature on file

Tim J. Harper
Air Traffic Manager
Nashville Air Traffic Control Tower

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N BNA 3120.106

Nashville Air Traffic Control Tower

Effective Date:
March 15, 2023

SUBJ: CHANGE TO TRAINING ORDER

1. Purpose of this Notice. The purpose of this Notice is to make changes to the BNA TRAINING ORDER, BNA 3120.1B.

2. Audience. This notice applies to all Nashville ATCT personnel.

3. Where Can I Find This Notice. This Notice can be found on the Federal Directives Repository.

4. Background. This Notice amends BNA 3120.1B, Appendix A, Appendix B to add allotted training hours for AD and DD positions and change allotted hours for CI1 and CI2, Appendix C to include the CIC Recommendation form, Appendix D-2-D to clarify familiarization requirements for WS position, Appendix F-2-b-(c) to clarify the definition of a control position, Appendix F=3-1) working from OS/OM to TA's Designee, Appendix F note regarding training on multiple positions, Chapter 2-3-I to change wording and requirements for reporting certifications, Chapter 2-3-J-1-4 to change number of positions with addition of AD and DD positions, Chapter 3-7 to change the requirement for certification, Chapter 3-9-F-1)-2) to clarify situations regarding a pause in training, Chapter 3-10-B-4 to correct a typographical error, Chapter 4-6 in regards to non-radar training, Chapter 4-8 to clarify the objectives of Controller-In-Charge and to add a note regarding training on multiple positions, Chapter 4-8-B-2) to indicate minimum hours for positions, Chapter 4-8-C-2 to change OS/OM to TA's designee, Chapter 4-8-C to add requirement for a SC, SI, WS, or Midnight CIC training plan to be entered in TEAM prior to training.

5. Procedures. Make corrections to all paper and electronic copies of the BNA 3120.1B and upload the Notice to the Federal Directives Repository.

Replace the Table of Contents to reflect new page numbers.

Replace Chapter 2, Roles and Responsibilities

Replace Chapter 3, Facility Training Programs

Replace Chapter 4, Terminal Program Description

Replace Appendix A, Annual Training Program

Replace Appendix B, Allotted Training Times

Replace Appendix C, CIC Training Information

Replace Appendix D, Currency and Familiarization

Replace Appendix F, Operational Supervisor Instructional Program Guide

signature on file

Marie Stewart
Air Traffic Manager
Nashville Air Traffic Control Tower

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N BNA 3120.105

Nashville Air Traffic Control Tower

Effective Date:
February 6, 2023

SUBJ: CHANGE TO TRAINING ORDER

- 1. Purpose of this Notice.** The purpose of this Notice is to make changes to the BNA TRAINING ORDER, BNA 3120.1B.
- 2. Audience.** This notice applies to all Nashville ATCT personnel.
- 3. Where Can I Find This Notice.** This Notice can be found on the Federal Directives Repository.
- 4. Background.** This Notice amends BNA 3120.1B, Appendix B, Allotted Training Hours. This change amends the training hours to reflect and accommodate the increase in traffic and target hours required for successful OJT.
- 5. Procedures.** Make corrections to all paper and electronic copies of the BNA 3120.1B and upload the Notice to the Federal Directives Repository.

Replace Appendix B, Allotted Training Hours

Marie Stewart
Acting Air Traffic Manager
Nashville Air Traffic Control Tower

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N BNA 3120.104

Nashville Air Traffic Control Tower

Effective Date:
September 3, 2021

SUBJ: CHANGE TO TRAINING ORDER

- 1. Purpose of this Notice.** The purpose of this Notice is to make changes to the BNA TRAINING ORDER, BNA 3120.1B.
- 2. Audience.** This notice applies to all Nashville ATCT personnel.
- 3. Where Can I Find This Notice.** This Notice can be found on the Federal Directives Repository.
- 4. Background.** This Notice amends BNA 3120.1B, Chapter 3: Facility Training Program, Section 8: Recertification, para. C and D to amend the minimum OJT requirements required for recertification due to loss of currency.
- 5. Procedures.** Make corrections to all paper and electronic copies of the BNA 3120.1B and upload the Notice to the Federal Directives Repository.

Replace Chapter 3: Facility Training Program.

RAYMOND E
CUMMINS

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Ray E. Cummins
Air Traffic Manager
Nashville Air Traffic Control Tower

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N BNA 3120.103

Nashville Air Traffic Control Tower

Effective Date:
August 30, 2021

SUBJ: CHANGE TO TRAINING ORDER

1. Purpose of this Notice. The purpose of this Notice is to make changes to the BNA TRAINING ORDER, BNA 3120.1B.

2. Audience. This notice applies to all Nashville ATCT personnel.

3. Where Can I Find This Notice. This Notice can be found on the Federal Directives Repository.

4. Background. This Notice amends BNA 3120.1B, Chapter 4 Terminal Program Description, Section 8, Controller-In-Charge (CIC) and Appendix C, Plan for CIC Training, to include Facility CIC (WS) certification requirements. Additionally, the CIC OJT Checklists for Tower CIC (SC) and TRACON CIC (SI) have been updated to align with the SI and SC job duties described in the SOP. A new CIC OJT Checklist for Facility CIC (WS) has been added to Appendix C. Appendix F, Operations Supervisor Instructional Program Guide, has been updated with the Facility-In-Charge (WS) certification requirements. Appendix B, Allotted Training Hours, has been updated to reflect new target hours for SRE. Appendix D, Currency and Familiarization, Section D-2-D, has been updated to describe WS staffing for those who maintain familiarity.

5. Procedures. Make corrections to all paper and electronic copies of the BNA 3120.1B and upload the Notice to the Federal Directives Repository.

Replace the Table of Contents to reflect new page numbers.

Replace Chapter 4, Terminal Program Description.

Replace Appendix B, Allotted Training Hours.

Replace Appendix C, Pgs. C-1 through C-2, Plan for CIC Training.

Replace Appendix C, Pgs. C-3 through C-7, Controller-In-Charge/SC Position OJT Checklist - Tower.

Replace Appendix C, Pgs. C-8 through C-11, Controller-In-Charge/SI Position OJT Checklist – TRACON.

Replace Appendix C, Pgs. C-12 through C-14, Controller-In-Charge/MIDSHIFT CIC OJT Checklist to reflect new page numbers.

Insert Appendix C, Pgs. C-15 through C-17, Controller-In-Charge/WS Position OJT Checklist-Facility.

Replace Appendix D, Currency and Familiarization.

Replace Appendix F, BNA Operations Supervisor Instructional Program Guide.

 
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Ray E. Cummins
Air Traffic Manager
Nashville Air Traffic Control Tower

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N BNA 3120.102

Nashville Air Traffic Control Tower

Effective Date:
06/11/2021

SUBJ: CHANGE TO TRAINING ORDER

- 1. Purpose of this Notice.** The purpose of this Notice is to make changes to the BNA TRAINING ORDER, BNA 3120.1B.
- 2. Audience.** This notice applies to all Nashville ATCT personnel.
- 3. Where Can I Find This Notice.** This Notice can be found on the Federal Directives Repository.
- 4. Background.** This Notice amends BNA 3120.1B, Appendix A, Annual Training Program to include mandatory training topic, Fatigue Awareness, IAW JO 3120.4. Additionally, added clarification to the Annual Radar Refresher description to include recovery in ATC operations.
- 5. Procedures.** Make corrections to all paper and electronic copies of the BNA 3120.1B and upload the Notice to the Federal Directives Repository.

RAYMOND E CUMMINS Digitally signed by
RAYMOND E CUMMINS
Date: 2021.06.09
12:22:21 -05'00'

Ray E. Cummins
Air Traffic Manager
Nashville Air Traffic Control Tower

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N BNA 3120.101

Nashville Air Traffic Control Tower

Effective Date:
June 4, 2021

SUBJ: CHANGE TO TRAINING ORDER

1. Purpose of this Notice. The purpose of this Notice is to make changes to the BNA TRAINING ORDER, BNA 3120.1B.

2. Audience. This notice applies to all Nashville ATCT personnel.

3. Where Can I Find This Notice. This Notice can be found on the Federal Directives Repository.

4. Background. N JO 3120.153 revised the OS/STMC Instructional Program Guide supporting OS/STMC certification requirements published in FAA Order JO 7210.3, Facility Operation and Administration. It also revised FAA Form 3120-45, Operations Supervisor/Supervisory Traffic Management Coordinator On-the-Job Training Report. N BNA 3120.101 updates qualifying position certification requirements for Operations Supervisors. Revisions have been made to Appendix B, previous experience categories. Modifications have been made to the CIC training path at BNA. Clarification to WS staffing have been made in Appendix D. Additionally, clarifications have been added to BNA recertification procedures.

5. Procedures. Make corrections to all paper and electronic copies of the BNA 3120.1B and upload the Notice to the Federal Directives Repository.

Replace the Table of Contents to reflect new page numbers.

Replace Chapter 3: Facility Training Program

Replace Chapter 4: Terminal Program Description

Remove Chapter 5: BNA Operations Supervisor Instructional Program Guide and checklists are now located in Appendix F.

Replace Appendix B: Allotted Training Hours

Replace Appendix C: Plan for CIC Training and CIC OJT Checklists

Replace Appendix D: Currency & Familiarization

Insert Appendix F: BNA Operations Supervisor Instructional Program Guide and Checklists

Date: 2021.06.01
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Ray E. Cummins
Air Traffic Manager
Nashville Air Traffic Control Tower

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Chapter 1: General Information

1. Purpose of this order. This order describes the Nashville ATC Tower training policy, establishes training procedures, assigns responsibility for all phases of training, and supplements national and regional directives. The primary objective of the program is to provide all specialists with the skills required for control proficiency.

2. Audience. This order applies to all air traffic personnel.

3. Where Can I Find This Order? This order is available in the main office library and the national repository.

4. Cancellation. This order cancels and replaces BNA 3120.1A, dated July 31, 2014.

Chapter 2: Roles and Responsibilities

In addition to the requirements stated in JO 3120.4, Air Traffic Technical Training, the following are specific local roles and responsibilities.

1. Training Administrator (TA). The Support Manager is designated as the TA. The TA must:

- A. Administer the facility training program.
- B. Ensure that the facility training program is planned, conducted, assessed, and revised on a continuous basis.
- C. Ensure that course materials, visual aids, and scenarios are properly developed, labeled, maintained, and updated.
- D. Schedule and coordinate all instructor-led and simulator training.
- E. Ensure training databases, documentation, and the National Training Database (NTD) is maintained.
- F. Coordinate assignments to OJT with the Operations Manager(s).
- G. Review and approve all facility briefing materials.
- H. Review, with the Principal Facility Representative (PFR), or their designee, facility training in areas including monthly Performance Assessments (PAs), Certification Skill Checks (CSCs), consistency of training, completeness of (or corrections to) OJT documentation and other relevant training issues.

2. Operations Manager (OM). The OM must:

- A. Provide oversight and direction to OSs to ensure compliance with training directives and goals.
- B. Collectively determine the placement of trainees.
- C. Coordinate Skill Enhancement Training needs with the TA for action.

3. Operations Supervisor (OS). The OS must:

- A. Establish Training Teams in accordance with JO 3120.4.
- B. Serve as the Training Team Lead.
- C. Conduct a Performance Assessment (PA) on a trainee within thirty (30) days of the start of OJT and then at least once each calendar month on each position on which the trainee is receiving OJT. The OS is encouraged to perform multiple PAs in a calendar month on a trainee when appropriate.

- D. Conduct Training Team Meetings a minimum of once per calendar month to discuss the trainee's process.
- E. Provide the OJT Checklist to the trainee at the first Training Team Meeting.
- F. To the extent practical, observe simulation training sessions for their employees.
- G. Coordinate all Skill Enhancement Training (SET) needs with the OM.
- H. Ensure that active On-the-Job Instructors (OJTIs) receive an evaluation every twelve (12) months.
- I. Advise the Quality Control Department when trainees obtain certification on local and their first RADAR position. This is to ensure compliance with AOV credentialing requirements.
- J. Advise the Training Department when trainees obtain benchmark certifications. Benchmarks are:
 - 1) Four (4) operational positions (25%). FD is not an operational position but is required if tower certifications are used to attain a higher career level.
 - 2) Eight (8) operational positions (50%).
 - 3) Twelve (12) operational positions (75%).
 - 4) All sixteen (16) operational positions (100%).
- K. Ensure that Proficiency Training assignments are completed.

4. Support Specialist. The Support Specialists assist in the administration of facility training.

5. On-The-Job Training Instructors (OJTIs). The OJTI must:

- A. Teach, instruct, coach, provide guidance on control judgement and demonstrate application of various techniques for ATC procedures. OJT instruction must be based on applicable national and local directives.
- B. Verbally provide performance feedback to a trainee as soon as possible after each OJT session, emphasizing both positive observations and areas needing improvement.
- C. Document and debrief OJT using the appropriate OJT instruction/evaluation report, or its electronic equivalent, by the end of the shift on which the OJT occurred.
- D. Complete the OJT Checklist.

6. Trainee. Refers to Developmental, CPC-IT and OS-IT. The trainee must:

- A. Be physically and mentally prepared to receive OJT.
- B. Exercise initiative and properly prepare to ensure satisfactory training progress.

- C. Be an active participant in their training to achieve certification.
- D. Be familiar with applicable LOAs, SOPs and other information pertinent to the operation.
- E. Advise the Training Team if an aspect of training is unclear or not understood.
- F. Review, discuss and sign the appropriate OJT instruction/evaluation report or its electronic equivalent.

7. Principal Facility Representative (PFR). A Member of NATCA is designated as the PFR. The PFR (or designee) must:

- A. Conduct regular meetings with the TA, or their designee, to review facility training in areas including monthly PAs, CSCs, consistency of training, completeness or corrections of OJT documentation and other relevant training issues.
- B. Collaborate with the TA on facility training processes.
- C. Review facility training documentation.
- D. Share input from Training Team Members with the TA.

Chapter 3: Facility Training Program

1. Facility Orientation. The success of any employee depends, to a considerable extent, on the introduction to the new job. First impressions are often the most lasting impressions. The Experience Checklist provides a reference to ensure that the new employee receives necessary information for a successful transition into Nashville ATCT.

2. Outline of the Training Program. The National Terminal Air Traffic Training Program establishes and describes the program implementation by terminal air traffic control facilities and the FAA Academy. The program provides for a standardized logical program of instruction for all terminal specialists from entrance on duty (EOD) to full performance. The program is based on the job/task analysis established in the Air Traffic Technical Training Directive, JO 3120.4.

3. Definition of “Training Time”. Training time is any time in which the individual is engaged in a training activity. All time spent receiving instructor-led training, self-study periods, simulation, On-the-Job-Familiarization (OJF), and OJT are training activities.

4. Recording of Cumulative Monthly Training. The cumulative total of OJT received each month is recorded in CRU-ART and will be recorded in TEAM.

5. Scope. The qualification training plan is divided into stages designed to develop the trainee’s ability to successfully work all positions of operation in the facility at the level of a Certified Professional Controller (CPC) and to maintain this level of proficiency. Each stage has minimum/maximum hours allotted for completion that should be maintained; however, the length of this training time allotted must not be the sole standard for evaluation of training progress. Failure to pass training requirements or make satisfactory progress in any stage of training may cause the termination of training in accordance with JO 3120.4. The training team must conduct a meeting prior to starting OJT and discuss the planned progression and the expected results within the OJT stages. The stages are divided into the following sections:

- A. Classroom. This section of training will be led by the Training Department. Either FAA or Contract employees can be the lead. Each stage of training will have a maximum amount of time available for this section of training.
- B. Simulation. This section of training will be accomplished prior to OJT. Tools which can be used to accomplish this training are Table-Top/CAB LAB, Tower Simulator System (TSS) and AT Coach. Pass/Fail criteria apply only to high-fidelity simulations (TSS and AT Coach).
- C. On-the-Job Training (OJT). In this section of each stage of training, the specialist will work on the position of operation under the direct supervision of an On-the-Job Training Instructor (OJTI). The OJTI is responsible for completing FAA Form 3120-25 for each training session in accordance with JO 3120.4. For each position on which training will be conducted, On-the-Job Familiarization (OJF) time may be allotted. A predetermined number of target hours of OJT have been established for each stage of training.

6. Grading System. The grading system is required to ensure that all trainees receive as near a standard grading as possible. Therefore, it is necessary that the philosophy contained herein be accepted and implemented by all that are entrusted with the responsibility to monitor, evaluate, and critique such individuals.

A. Classroom Grading: The classroom grading process involves several types of material and each is assigned a minimum score that is considered satisfactory.

1. Written tests - 70%
2. Approach Plate Data - 70%
3. Maps - 70%

B. High-Fidelity Simulation Pass/Fail Criteria. High-fidelity simulation includes AT Coach and TSS. A passing score is attained by averaging the scores of all evaluation scenarios using the criteria established in JO 3120.4, Appendix B. A passing score is defined as a score of at least 70%.

7. Position Certification. The trainee must reach at least the minimum training hours to be recommended for certification.

A. Training Team Meetings will be accomplished in accordance with the JO 3120.4. The OS will go through items on the OJT Checklist with the trainee at each meeting. The OJTIs must complete the OJT Checklist prior to certification and returned to the Training Department to be kept with the trainee's other training documents.

B. The Training Team will ensure that the trainee has the needed knowledge, skills and abilities to work the position in a safe and proficient manner. The Certification Skill Check (CSC) must be conducted following a Training Team Meeting where the majority of the team members recommend a CSC. The OS must be among the majority.

C. For a CSC to result in certification, all applicable job subtasks must be rated as satisfactory or not observed. If a job subtask is not observed during this evaluation, the OS must document that the trainee has demonstrated satisfactory performance/knowledge for that job subtask through verbal/written questions, simulation or other methods.

D. If a CSC does not result in certification, a Training Team Meeting must be conducted as soon as possible to determine a future course of action.

8. Recertification. Those who fail to meet currency requirements and those who are decertified on one or more operational positions must be recertified prior to the resumption of operational duties in accordance with JO 3120.4.

A. Within 30 days. At the discretion of an OS, an individual may be recertified without training. If the individual does not achieve recertification, then training must be assigned under subparagraph B below.

B. More than 30 days but fewer than 120 days. The individual must receive OJT of up to 50 percent of Target Time established for a trainee without previous experience. Training may include

electronic learning, classroom, PTT, or simulation at the discretion of the TA.

- C. Between 120 days and 6 months. The individual must receive OJT of up to 100 percent of Target Time established for Category A. The minimum amount of OJT will be determined collaboratively between the TA, PFR, OM, ATM and Training Team on an individual basis. Training must include classroom and simulation. The method of recertification will be determined collaboratively between the TA, PFR, OM, ATM and Training Team.
- D. Greater than 6 months. The individual must receive OJT of up to 100 percent of Target Time established for Category A. The minimum amount of OJT will be determined collaboratively between the TA, PFR, OM, ATM and Training Team on an individual basis. Training must include classroom and simulation. Recertification must be accomplished on each operational position on the current configurations in use at the time of recertification.

9. Proficiency Training (Recurrent, Refresher, Supplemental, and Skill Enhancement) and Remedial Training. Proficiency training is a continuous program. This order establishes an annual written proficiency training program for all personnel whom maintain operational currency.

- A. Objective. The objective of proficiency training is to maintain and upgrade the knowledge and skills necessary to apply air traffic procedures. This training can expand the technical knowledge of all operational personnel which in turn will result in improved proficiency and an enhanced professional performance of air traffic control duties.
- B. Procedures. Training material will be developed on the subjects as outlined in Appendix A of this order, on a yearly basis. Either FAA personnel or Training Contractors will administer this training during briefings. In addition, proficiency training will include all mandatory briefing items distributed by Headquarters, Service Centers, the District and/or the facility.
- C. Recurrent Training. Recurrent Training will be led by, at a minimum, one OS and one NATCA representative. This training is developed at a national level and will be conducted in accordance with JO 3120.4.
- D. Refresher Training. Refresher Training is conducted to maintain and update previously learned knowledge and skills. All operational personnel must complete Refresher Training. The Annual Refresher Training Program can be found in Appendix A.
- E. Supplemental Training. Each employee will receive supplemental training whenever a significant change pertaining to new or revised procedures, regulations, or equipment occurs. Each employee will be briefed on national and local changes prior to the effective date of the change. Short deadlines may occasionally require a special effort.
- F. Skill Enhancement Training (SET). SET is used to improve or enhance an individual's knowledge, skills, and abilities. There are two types of SET:
 - 1) Skill Improvement Training (SIT – [No pause in training](#)): The purpose of SIT is to provide an individual an opportunity to participate in training that will enrich their ATC skills, abilities and knowledge through simulation, electronic learning, observation, etc.

SIT is not used to correct a performance deficiency. SIT will be conducted in accordance with JO 3120.4.

- 2) Skill Development Training (SDT – [Pause in Training](#)): The purpose of SDT is to improve a specific performance deficiency for an individual who is certified or receiving OJT on a position. SDT will be conducted in accordance with JO 3120.4.

G. Remedial Training. The purpose of Remedial Training is to correct a documented performance deficiency that results in decertification. Remedial Training will be conducted in accordance with JO 3120.4.

10. Training Documentation Requirements.

A. Training Plans.

- 1) The purpose of the training plan is to provide a blueprint for Field Qualification Training that develops employee knowledge, skills and abilities. The Training Plan will help ensure that the integrity of the training program is maintained and the trainee is afforded all reasonable opportunity for success. The Training Plan is a document that is reviewed in a Training Team Meeting prior to the start of OJT.
- 2) The Training Plan will be developed in accordance with JO 3120.4 and retained in TEAM.

B. On-The-Job Familiarization (OJF).

- 1) Trainees will be assigned a minimum of 1 OJF hour per position on at least two operational positions in the Tower and at least two operational positions in the TRACON.
- 2) Additional OJF hours may be assigned by the OS based on training team recommendations.
- 3) OJF assignments must be noted in the trainee's Training Plan.
- 4) FAA Form 3120-25, OJT Instruction/Evaluation Report, must be completed by the trainer for each period of OJF.

C. Training Hours. Facility allotted target hours are described in Appendix B.

D. On-The-Job Training (OJT) Forms. FAA Form 3120-25, OJT Instruction/Evaluation Report, or electronic equivalent, will be used for OJT as follows:

- 1) After completion of the session, the debrief and documentation must occur by the end of the shift on which the OJT occurred.
- 2) The OJTI and trainee must digitally sign the form.

- 3) All electronic Forms 3120-25 must be digitally signed by the OS.
 - 4) The forms are retained in TEAM in accordance with applicable directives.
 - 5) Paper FAA Forms 3120-25 are used in lieu of electronic forms in the event of automated program outage.
- E. Performance Assessments. FAA Form 3120-25, OJT Instruction/Evaluation Report, or electronic equivalent, must be used for Performance Assessments as follows:
- 1) After completion of the session, debrief must occur the day of training unless extenuating circumstances dictate otherwise.
 - 2) The evaluator and trainee must digitally sign the form.
 - 3) All Performance Assessments must be digitally signed by the OS.
 - 4) The forms are retained in TEAM in accordance with applicable directives.
 - 5) Performance Assessments are permitted on consolidated positions only if training occurred on these positions while consolidated. The outcome of the skill check is applicable to all positions involved.
 - 6) Paper FAA Forms 3120-25 are used in lieu of electronic forms in the event of automated program outage.
- F. Certification Skill Checks. FAA Form 3120-25, OJT Instruction/Evaluation Report, or electronic equivalent, must be used for Certification Skill Checks as follows:
- 1) After completion of the session, debrief must occur the day of training unless extenuating circumstances dictate otherwise.
 - 2) The evaluator and trainee must digitally sign the form.
 - 3) The forms are retained in TEAM in accordance with applicable directives.
 - 4) Certification Skill Checks are permitted on consolidated positions only if a recommendation occurred while these positions were consolidated. The outcome of the CSC is applicable to all positions involved.
 - 5) Paper FAA Forms 3120-25 are used in lieu of electronic forms in the event of automated program outage.

Chapter 4: Terminal Program Description

Information contained in this section is based on the current JO 3120.4 as it relates to the training conducted at this facility. If the trainee has previous experience, an Experience Checklist must be completed to determine the training needs of the trainee.

1. Stage 2 and Stage 3: Flight Data and Clearance Delivery (FD/CD). TRACON Flight Data will not be required at this facility. Training for this stage consists of classroom and OJT. Pass/Fail criteria apply to the classroom portion of this stage. If a passing score is not achieved, additional actions will be conducted in accordance with JO 3120.4.

- A. Classroom. Up to 80 hours are allotted for this stage of training. A training syllabus will be used to ensure all pertinent information, as stipulated in JO 3120.4, is reviewed. This syllabus will be retained with the trainee's other required training documentation. An end-of-lesson test will be administered for local lesson plans. To complete this stage, the trainee must achieve a passing score of 70% or higher.
- B. OJT. Through OJT, the trainee must demonstrate the ability to satisfactorily perform the applicable job functions. The total number of training hours allocated, as listed in Appendix B, for the two (2) stages will be added together and the trainee will be allotted the combined total number of hours. OJT Checklists will be provided at the initial training team Meeting to be completed by the OJTI as training progresses. The completed OJT checklists must be retained with the other required training documentation.
- C. In addition to satisfactory completion of all above items, a satisfactory Certification Skills Check by an Operations Supervisor is required for certification on the Flight Data/Clearance Delivery position.

2. Stage 4: Ground Control (GC). Training consists of classroom, simulation and OJT. Pass/Fail criteria apply to the classroom portion of this stage. If a passing score is not achieved, additional actions will be conducted in accordance with JO 3120.4.

- A. Classroom. Up to 40 hours are allotted for this stage of training. A training syllabus will be used to ensure all pertinent information, as stipulated in the JO 3120.4, is reviewed. This syllabus will be retained with the trainee's other required training documentation. An end-of-lesson test will be administered for local lesson plans. To complete this stage, the trainee must achieve a passing score of 70% or higher.
- B. Simulation. A minimum of one (1) Table-Top/CAB LAB scenario will be conducted. The Ground Control Simulation Checklist must be utilized during the simulation training to document all required information has been received. The checklist will be retained with the individual's other training documentation.
- C. OJT. Through OJT, the trainee must demonstrate the ability to satisfactorily perform the applicable job functions. The allotted hours for this stage are listed in Appendix B. An OJT Checklist will be provided at the initial Training Team Meeting to be completed by the OJTI as training progresses. The completed OJT Checklist must be retained with the

other required training documentation.

- D. In addition to the satisfactory completion of all above items, a satisfactory Certification Skills Check by an Operations Supervisor is required for certification on the Ground Control position.

3. Stage 5: Local Control/Cab Coordinator (LC/CC2). Training consists of classroom, simulation, and OJT. Pass/Fail criteria apply to the classroom and high-fidelity simulation (if available) portions of this stage. If a passing score is not achieved, additional actions will be conducted in accordance with JO 3120.4.

- A. Classroom. Up to 60 hours are allotted for this stage of training. A training syllabus will be used to ensure all pertinent information, as stipulated in the JO 3120.4, is reviewed. This syllabus will be retained with the trainee's other required training documentation. An end-of-lesson test will be administered for local lesson plans. To complete this stage, the trainee must achieve a passing score of 70% or higher.
- B. Simulation. A minimum of one (1) Table-Top/CAB LAB scenario will be conducted. The Local Control Simulation Checklist must be utilized during the simulation training to document all required information has been received. The checklist will be retained with the individual's other training documentation.
- C. If the Tower Simulator System (TSS) is available for use, the simulation scenarios may be accomplished using it instead of Table-top/CAB LAB. TSS scenarios are available starting at 50% volume level and progressively increasing to 110% volume level.
 - 1) Instructional Scenarios. These scenarios provide the trainee with the opportunity to practice performing position duties prior to an Evaluation.
 - 2) Pre-Evaluation Scenarios. A pre-evaluation scenario will be administered prior to the first evaluation scenario
 - 3) Evaluation Scenarios. A minimum of three (3) evaluation scenarios will be administered. The evaluations are subject to pass/fail criteria.
 - i. Following a score of less than 70% on any one but the final evaluation scenario, the TA will assign, via memorandum, additional training designed to address identified performance deficiencies. Additional training must be completed prior to the next scenario and documented on FAA Form 3120-25 or electronic equivalent.
 - ii. A passing score is attained by averaging the scores of all evaluation scenarios using the criteria established in JO 3120.4, Appendix B. If an average passing score of at least 70% is not achieved following the final evaluation scenario, the TA will issue a suspension of training memorandum to the trainee and a training review will be conducted in accordance with JO 3120.4.
 - iii. The evaluations must be graded by an Operations Supervisor or by a certified Contract Instructor IAW JO 3120.4.

Stage 6: Local Control Simulation Requirements

Level of ATC Experience	Instructional Scenarios	Pre-Evaluation Scenarios	Evaluation Scenarios	Recovery Scenarios	Volume Percentages
No Air Traffic Certifications	<i>Min 15/ Max 30</i>	<i>Min 1</i>	3	<i>Min 4</i>	70, 80, 90
ATCT8 or Lower Certifications	<i>Min 15/ Max 30</i>	<i>Min 1</i>	3	<i>Min 4</i>	70, 80, 90
ATCT9 or Above Certifications	<i>Min 15/ Max 30</i>	<i>Min 1</i>	3	<i>Min 4</i>	70, 80, 90

- D. **Recovery Training.** This training focuses on how to recover after an unsafe situation and effectively re-establish the margin of safety after a loss of separation. Topics may include, but are not limited to runway incursions, missed approach, go-arounds, compression, hear-back/read-back, similar sounding callsigns, airport construction, transposed callsigns, lost communication, emergencies, etc.
- 1) Training must be conducted in three parts: classroom discussion, scenarios, and post-scenario discussion. The post-scenario discussions should include inadequate recovery actions to mitigate the event, other recovery actions that could be taken to mitigate the event, possible controller actions that could make the event worse, and situations where no recovery actions were necessary.
 - 2) A minimum of four (4) scenarios involving recovery must be administered IAW JO 3120.4. These scenarios are not pass/fail and have no time limitations.
- E. **OJT.** Through OJT, the trainee must demonstrate the ability to satisfactorily perform the applicable job functions. The allotted hours for this stage are listed in Appendix B. An OJT Checklist will be provided at the initial Training Team Meeting to be completed by the OJTI as training progresses. The completed OJT Checklist must be retained with the other required training documentation.
- F. The following exams must be administered prior to certification:
- 1) Terminal Radar Qualification Exam
 - 2) National Weather Service Visibility Observers Examination
- F. In addition to the satisfactory completion of all above items, a satisfactory Certification Skills Check by an Operations Supervisor is required for certification on the Local Control Position.
- G. **Cab Coordinator (CC2) prerequisites:** Prior to certification on the Cab Coordinator position, the trainee must certify on Ground Control and Local Control.

4. Terminal Basic RADAR Training (RTF) Course 50034001 or current course. Training is conducted at the FAA Academy in accordance with JO 3120.4.

5. TRACON Skill Enhancement Workshop (TSEW) Course 50056002 or current course. Training is conducted at the FAA Academy in accordance with JO 3120.4.

6. Stage 6: Nonradar Terminal Control. Due to the redundancies with the RADAR, we no longer train how to work NON-RADAR. Procedures on how to handle momentary loss of RADAR will be covered in the Recovery Simulations.

7. Stage 7: Radar/Hand-Off/Coordinator Controller Training. Training consists of classroom, Part Task Training (PTT), simulation, recovery training and OJT. Pass/fail criteria apply to the classroom and simulation portions. If a passing score is not achieved, additional actions will be conducted in accordance with JO 3120.4.

- A. Classroom. Up to 80 hours are allotted for this stage in training. A training syllabus will be used to ensure all pertinent information, as stipulated in JO 3120.4, is reviewed. An end-of-lesson test will be administered for local lesson plans. To complete this stage, the trainee must achieve a passing score of 70% or higher.
- B. Part Task Training (PTT). Pass/fail criteria do not apply. PTT is used to reinforce lessons learned in the classroom via simulation scenarios. PTT scenario content is restricted to teaching a limited number of skills at a time. Scenarios are intended to prepare the trainee for upcoming instructional scenarios. PTT scenarios will focus on the following areas:
 - 1) Scanning
 - 2) Vectoring
 - 3) Speed Control
 - 4) Phraseology
 - 5) Other topics as determined locally
- B. Simulation. Pass/fail criteria apply. The Radar Control Simulation Checklist must be utilized during the simulation training. The checklist will be retained with the trainee's other training documentation.
 - 1) Instructional Scenarios. These scenarios provide the trainee with the opportunity to practice performing position duties prior to an evaluation.
 - 2) Pre-Evaluation Scenarios. A pre-evaluation scenario will be administered prior to the first evaluation scenario. Additional pre-evaluation scenarios may be administered prior to all evaluation scenarios. A pre-evaluation does not count toward the average grade for evaluation scenarios.
 - 3) Evaluation Scenarios. These scenarios will be administered at regular intervals during the simulation segment of training. Two (2) evaluations will be conducted at 70% and 90% volume. Evaluation scenarios are subject to pass/fail criteria.
 - i. Following a score of less than 70% on the first evaluation scenario, the TA will assign, via memorandum, additional training designed to address identified performance deficiencies. Additional training must

be completed prior to the next scenario and documented on FAA Form 3120-25 or electronic equivalent.

- ii. A passing score is attained by averaging the scores of all evaluation scenarios using the criteria established in JO 3120.4, Appendix B. If an average passing score of at least 70% is not achieved following the final evaluation scenario, the TA will issue a suspension of training memorandum to the trainee and a training review will be conducted in accordance with JO 3120.4.
- iii. The evaluations must be graded by an Operations Supervisor or by a certified Contract Instructor IAW JO 3120.4.

Stage 7: Radar Simulation Requirements

Level of ATC Experience	Instructional Scenarios	Pre-Evaluation Scenarios	Evaluation Scenarios	Recovery Scenarios	Volume Percentages
No Previous Radar Certifications	<i>Min 20/ Max 30</i>	<i>Min 1</i>	<i>2</i>	<i>Min 4</i>	70,90
Previous Enroute Certifications	<i>Min 20/ Max 30</i>	<i>Min 1</i>	<i>2</i>	<i>Min 4</i>	70,90
Previous TRACON Certifications	<i>Min 20/ Max 30</i>	<i>Min 1</i>	<i>2</i>	<i>Min 4</i>	70,90

C. Recovery Training. This training focuses on how to recover after an unsafe situation and effectively re-establish the margin of safety after a loss of separation. Topics may include, but are not limited to, converging aircraft, aircraft climbing through the altitude of a level aircraft, faster aircraft climbing through the altitude of a slower aircraft, compression, hear-back/read-back, similar sounding call signs, aircraft responding to a TCAS RA, loss of data block, transposed call signs, lost communication, emergencies, loss of radar, etc.

- 1) Training must be conducted in three parts: classroom discussion, scenarios, and post scenario discussion. The post scenario discussions should include inadequate recovery actions to mitigate the event, other recovery actions that could be taken to mitigate the event, possible controller actions that could make the event worse, and situations where no recovery actions were necessary.
- 2) A minimum of four (4) scenarios involving recovery will be administered. These scenarios are not pass/fail and have no time limitation.

D. OJT. Through OJT, the trainee must demonstrate the ability to satisfactorily perform the applicable job functions. The allotted hours for this stage of training are defined in Appendix B. OJT Checklists will be provided at the initial Training Team Meeting to be completed by the OJTI as training progresses. The completed OJT Checklists must be retained with the other required training documentation.

- E. In addition to the satisfactory completion of all items above, a satisfactory Certification Skills Check by an OS is required for certification on all radar positions.

8. Controller-In-Charge (CIC). The objective of watch supervision is to ensure safety and operational efficiency. Watch supervision at BNA ATCT/TRACON can be performed by a Certified Professional Controller (CPC) who has successfully completed CIC training. There are four (4) levels of CIC at BNA ATCT/TRACON —Tower CIC (SC), TRACON CIC (SI), Facility CIC (WS) and Midnight CIC.

NOTE: If training on multiple CIC positions or skipping positions, it is not required to meet the OJT requirements of each individual position. The Training MID is still required if skipping the Midwatch CIC.

- A. Prior to beginning CIC training, (except in the case of Midnight CIC), the CIC trainee must be recommended by the Facility CIC Recommendation Panel.
- 1) The panel is designated to perform the duties described in JO 7210.3, Paragraph 2-6-4, Controller-In-Charge (CIC) Selection Process.
 - 2) The panel must consist of at least one OS, Operations Manager and Union Representative.
 - 3) The panel will forward its recommendations, via memorandum, to the ATM or his/her designee.
- B. CIC trainees must meet the following prerequisites:
- 1) For Tower CIC (SC), the CIC trainee must be fully certified through the Tower, including Cab Coordinator, for a minimum of six months unless previously certified in a like facility as a CIC.
 - 2) For TRACON CIC (SI), the CIC trainee must be fully certified through the TRACON, CI1 and CI2, for a minimum of six months unless previously certified in a like facility as a CIC. The ATM may grant exceptions to this prerequisite.
 - 3) For Facility CIC (WS), the CIC trainee must be fully certified at BNA ATCT/TRACON including Tower CIC (SC) and TRACON CIC (SI).
 - 4) For Midnight CIC and Facility CIC (WS), the CIC trainee must be fully certified at BNA ATCT/TRACON.
 - 5) For Midnight CIC, local CIC training must be completed within 30 days of becoming fully certified at BNA ATCT/TRACON.
 - 6) Meet facility operational currency requirements.
 - 7) Except in the case of Midnight CIC, be recommended by the facility CIC Recommendation Panel and be selected by the ATM.

8) Successfully complete CIC initial training, as described below.

C. The following training must be accomplished.

- 1) eLMS Course 57060002, Facility CIC Course, Terminal, or current course. BNA ATCT/TRACON will comply with current national requirements regarding this course.
- 2) Instructor-led training (Course #55073001 Part A). The CIC trainee will conduct site-specific instruction with the [TA's designee](#) for a minimum of 4 hours and not to exceed 12 hours. The Instructor-led training will be conducted prior to OJT for all stages. This training should cover information such as watch supervision requirements, operations and resource management, unusual situations, how to handle accidents/incidents, leave administration, and training procedures. Prior to training for the Tower CIC (SC) position, the instructor-led training will concentrate on the above information as it pertains to the tower. Prior to training for the TRACON CIC (SI) position, the instructor-led training will concentrate on the above information as it pertains to the TRACON. Prior to training for the Facility CIC (WS) position, the instructor-led training will concentrate on the above information as it pertains to the operation of the combined facility (ATCT and TRACON).
- 3) OJT (Course #55073001 Part B). This phase will be administered by an OS or OM. OJT will be recorded on FAA Form 3120-36, Controller-In-Charge OJT Instruction/Evaluation Report, or electronic equivalent. The following number of hours is allotted for this phase of training:

Tower CIC (SC):

- a. Trainees that have not previously performed Tower CIC (SC) duties:
 - i. Minimum of 4 hours
 - ii. Maximum of 12 hours
- b. Trainees that have previously performed Tower CIC (SC) duties:
 - i. Minimum of 4 hours
 - ii. Maximum of 8 hours

TRACON CIC (SI):

- a. Trainees that have not previously performed TRACON CIC (SI) duties:
 - i. Minimum of 4 hours
 - ii. Maximum of 16 hours
- b. Trainees that have previously performed TRACON CIC (SI) duties:

- iii. Minimum of 4 hours
- iv. Maximum of 8 hours

Facility CIC (WS):

- a. Trainees that have not previously performed Facility CIC (WS) duties:
 - i. Minimum of 8 hours
 - ii. Maximum of 20 hours
- b. Trainees that have previously performed Facility CIC (WS) duties:
 - i. Minimum of 4 hours
 - ii. Maximum of 12 hours

Midnight CIC:

- a. Trainees that have not previously performed CIC duties:
 - i. Minimum of 4 hours
 - ii. Maximum of 12 hours
 - b. Trainees that have previously performed CIC duties:
 - i. Minimum of 4 hours
 - ii. Maximum of 8 hours
- 4) Be briefed on facility orders and policies by the Operations Manager, or designee.
 - 5) Work a Training Mid-shift with a certified CIC (OJTI certified) prior to certifying on Midnight CIC. The Training Mid will be documented on FAA Form 3120-25, OJT Instruction/Evaluation Report, as OJF.
 - 6) CIC certifications must be recorded on FAA Form 3120-36, Controller-In-Charge OJT Instruction/Evaluation Report, or electronic equivalent.

The CIC Training Plan for Tower (SC), TRACON (SI), Facility (WS) and Midnight CIC must be completed in TEAM prior to CIC training. The recommendation form and the checklist for each CIC may be found in Appendix C.

9. On-The-Job Training Instructor (OJTI). To be eligible, the controller must be a CPC. The controller must also be certified a minimum of 12 months on the positions on which he/she will be conducting OJT. Previous OJTIs with experience on the same type position are exempt from the 12-month waiting period. However, they must be certified on the positions involved for a minimum of 3

months prior to conducting OJTI.

- A. The candidate's OS must submit a recommendation to the OM/ATM via FAA Form 3120-148, OJTI Candidate Abilities and Attributes Report.
- B. An OJTI Selection Panel will adjourn as determined by the ATM. The panel will be composed of, at a minimum, one OM, one OS, and the NATCA facility representative. Other members may be added at the discretion of the ATM. The panel will select OJTI candidates and forward their recommendations to the ATM for final determination.
- C. The candidate must complete Course 55049001, Basic On-the-Job Instructors' (OJTI) Techniques or current course after being selected as an OJTI.
- D. To be certified as an OJTI, an OS must directly observe the OJTI's performance during his/her first OJT session. The OS must then document the certification and forward the documentation to the TA for retention. OSs must conduct an over-the-shoulder evaluation every 12 months thereafter.
- E. A roster of all certified OJTIs will be maintained in the NIDS.

ANNUAL TRAINING PROGRAM

Note: Recurrent Training will cover topics as listed in JO 3120.4. The Refresher Training is intended to supplement with additional topics. Any topic covered in Recurrent Training can also be covered in our Refresher Training if additional emphasis is needed.

1. Annual Refresher Training. The following topics will be administered annually:

Lost aircraft orientation
Recovery in ATC operations
Safety Alerts
Fatigue Awareness
BNA Contingency Plan
Hijacking
Facility Evacuation
Military Intercept
Airspace Intruders
Weather
Pilot Weather Report (PIREP) solicitation/dissemination
Transitioning from FSL to DSA
PET 2000
Tower Visibility
Snow and Ice Plan
Phraseology
Speed Control
Teamwork

2 Hour Annual Radar Refresher Simulation Training to include safety alerts and other topics indicated by local quality control.

1 Hour Annual CIC Refresher Training to include the handling of accidents, reporting incidents, unusual situations, upward reporting, Domestic Events Network (DEN) notifications, emergency events and other items as needed.

OJTI Refresher to include techniques, best practices, coaching, review, completion of the appropriate OJT form.

2. Additional topics which are required annually:

SUBJECT	REFERENCE
Standards of Conduct	HRPM
Fire Prevention/Evacuation Drills	BNA FSP
ASH SAVI	eLMS
DOT Information System Security LOB Awareness	eLMS

ALLOTTED TRAINING TIMES

	CAT A	
	MIN	MAX
CD/FD*	16	88
GC*	35	193
LC1*	35	182
LC2*	20	90
CC2	6	33
AD*	10	150
DD*	10	150
DRW*	40	250
ARW*	10	94
DRE*	40	250
ARE*	10	94
SRE*	15	60
FRW*	15	83
FRE*	15	83
CI1	10	88
CI2	1	6

	CAT B	
	MIN	MAX
CD/FD*	11	62
GC*	25	136
LC1*	24	135
LC2*	14	62
CC2	4	24
AD*	8	120
DD*	8	120
DRW*	28	180
ARW*	7	94
DRE*	28	180
ARE*	7	94
SRE*	4	54
FRW*	11	59
FRE*	11	59
CI1	6	60
CI2	1	6

	CAT C	
	MIN	MAX
CD/FD*	3	18
GC*	14	77
LC1*	15	80
LC2*	10	42
CC2	2	14
AD*	6	100
DD*	6	100
DRW*	16	100
ARW*	4	44
DRE*	16	100
ARE*	4	44
SRE*	2	36
FRW*	6	33
FRE*	6	33
CI1	4	40
CI2	1	6

CAT	EXPERIENCE LEVEL - ATCT	EXPERIENCE LEVEL – TRACON
A	No previous ATCT certifications	No previous TRACON and/or ARTCC/CCF certification
B	Certified ATCT level 7 and below (includes former DOD/FCT)	Certified TRACON level 7 and below Certified ARTCC/CCF
C	Certified ATCT level 8 and above (includes former DOD/FCT)	Certified TRACON level 8 and above

*** TRAINING ON COMBINED POSITIONS:** Training on combined positions is authorized when the combination of the positions is a routine configuration. The following list identifies positions which are routinely combined:

CD/FD & GC
LC1 & LC2
AD & DRW & ARW & FRW
DD & DRE & ARE & SRE & FRE
ARE & ARW
FRW & FRE

NOTE: For AD & DD, 50% of the minimum hours must be worked de-combined.

Adjustments to category classification may be made in cases of unique individual experience with recommendation by the TT and TA concurrence. Operational Supervisors (OS) will train and certify on CD/FD/GC/LC/CC2/CI1/CI2 and at least one (1) arrival RADAR position and one (1) departure RADAR position. A minimum of five (5) hours of familiarization must be conducted on all other operational positions during light-moderate traffic volume. Training may be accomplished on combined positions as indicated above.

APPENDIX C: CIC RECOMMENDATION

- *To be recommended the controller must:*
 - *A) be operationally current*
 - *B) be certified for at least 6 months in the tower for **SC ONLY***
 - *C) be certified for at least 6 months in the TRACON for **SI ONLY***
 - *C) be certified for at least 6 months throughout the facility for **WS***
- *The Controller's immediate Operational Supervisor may request recommendation for CIC.*

Name and Operating Initials_____

Request SC/SI/WS? _____

Tower/Facility Certification Date_____

Date of Request_____

Operational Supervisor _____

CIC at Prior Facility? (Yes or No)_____

Prior Facility ID _____

This Panel's recommendation will be submitted to the Air Traffic Manager or his/her designee.

	Recommend (YES/NO)	Date
Operational Supervisor_____	_____	_____
Operations Manager_____	_____	_____
NATCA Representative_____	_____	_____

APPROVED / DISAPPROVED (circle)

Air Traffic Manager, Nashville ATCT

Date

Controller-In-Charge / SC Position OJT Checklist - Tower				
Name of SC:		OJT/ OS/OM	Trainee	DATE
A. Operational Oversight				
1	Ensure available resources are deployed appropriately in the Tower. When resources are simultaneously utilized in both operational areas, the SI/SC must coordinate with the WS to ensure shared awareness of facility configuration and utilization of resources. In situations where resources are limited and a priority of position assignment must be established, the WS must determine how available resources are deployed.			
2	Monitor current and anticipated air traffic volume and complexity, including weather and other surface or airborne constraints, and assign available personnel in the most optimal manner to support the integrity of the operation. To the extent traffic volume and staffing permits, position assignments should be rotated among the qualified employees to allow them to work operational positions and support completion of other duties including on-the-job training, briefings, meeting attendance, administrative work and non-operational tasks, etc.			
3	Only work an operational position while assigned SC duties on a limited basis during periods of low air traffic activity. If the SC is engaged in an activity which will interfere with or preclude the performance of operational area supervision duties, delegate the activity or assign another qualified individual to supervise the operational area.			
4	Open Tower Coordinator position (CC2) when traffic volume and/or complexity warrant additional personnel to supplement operational communication/coordination or perform other duties of those positions.			
5	Coordinate with WS regarding additional resource needs and prior to any assignment of overtime. If immediate action is required (due to end of shift, unplanned absence of personnel, excessive volume/complexity or workload, etc.) and the WS cannot be reached, use good judgment in resolving resource shortages and/or assigning overtime.			
6	Assign personnel to accomplish on-the-job training (OJT) and related activities according to current facility and/or organizational guidance.			
7	Ensure personnel are provided adequate non-position time to complete required operational briefings and training.			
8	Ensure that breaks are administered in their assigned areas IAW national directives, contractual agreements, and locally developed facility directives/ agreements so as to promote the efficiency of the Agency.			

	9	Know the whereabouts of employees to ensure their availability for position assignments. SC must notify the WS prior to authorizing personnel to leave the facility.			
	10	Ensure PIREPS are solicited and disseminated as required by FAA JO 7110.65. Disseminate PIREPS by entering into AIS-R or relaying to ZME-FD and entering information into the IDS. PIREPS that are received via FDIO but are applicable to BNA reporting area (within 50nm) must be entered into the IDS. In addition to entering PIREPs in the IDS, notify the SC/SI or WS as necessary and relay to MQY Tower when applicable.			
	11	Ensure all pertinent significant weather advisories to include but not limited by SIGMETs, AIRMETS, CWAS and all other known or observed weather that may affect aircraft safety are broadcast.			
	12	Implement Operational Contingency Plans as required.			
	13	Accommodate Special Operations and conduct monitoring of Presidential Aircraft IAW agency directives.			
	14	Configure, monitor, and report equipment status including changes to the WS position. Log all equipment outages on FAA Form 7230-4, Facility Log, and update the IDS. Inform the SI/CIC and all controllers in the Tower of changes in equipment status/configuration which may adversely affect the presentation or performance of that equipment.			
	15	Eliminate distractions in the operating quarters by avoiding activities or tasks that may lead to distraction. Examples include: Supervisory administrative tasks that distract from oversight of the operation and can be otherwise accomplished, OJT debriefings, Training Team meetings, other than "pre-duty" briefings, etc. Additionally: *Breaks should be accomplished outside the operating quarters. *Tours must be removed from the operation if they cause a distraction. *Non-operational material should be removed from the operating quarters.			
	16	Make on-the-spot corrections and stop instances of inappropriate behavior, harassment, etc., then report actions/outcomes to WS. (Note: On-the-spot corrections are not considered an evaluation of performance and are required of both OS and CICs.)			
B. Resource Management					
	1	Designate a SC/CIC during periods of absence from the Tower IAW JO 7210.3, 2-6-2			
	2	Assign personnel and activate positions as traffic and staffing dictate.			
	3	Coordinate with the SI/WS regarding runway configuration and Arrival Acceptance Rates.			

	4	Notify the SI/WS that deicing procedures are in effect and the impact on arrival and departure flow rates.			
	5	Ensure the accuracy of the IDS and pertinent NOTAMs are displayed.			
	6	Refer to and comply with the checklists in BNA SOP Appendix 2 for: *Runway Changes (Appendix 2-7) *Runway Closures (Appendix 2-8) *Runway Openings (Appendix 2-9)			
	7	Whenever practicable, the SC position will be plugged in with a headset via the ETVS SC position.			
	8	Inform the SI/WS of the position configuration in the Tower and procedures that might affect the operation of the TRACON such as: *Low Activity Procedures *Combining of Positions			
C. Administrative Functions					
	1	Complete specific SC tasks by shift as described in BNA SOP Chapter 2, Appendix 2-3 for day shift; Appendix 2-4 for evening shift; and Appendix 2-5 for midnight shift. Additionally, follow the Tower watch checklist found in Appendix 2-6.			
	2	Coordinate leave, shift change and other schedule-related requests with the WS.			
	3	Forward operationally-related medical information to the WS.			
	4	Forward public concerns including noise complaints to the WS.			
	5	Comply with contractual requirements.			
	6	Refer to and comply with the checklists in BNA SOP Appendix 2 for: *Runway Changes (Appendix 2-7) *Runway Closures (Appendix 2-8) *Runway Openings (Appendix 2-9)			
	7	When LUAW operations are being utilized, SC must assist LC to the maximum extent possible in maintaining awareness of aircraft positions on and near the airport.			
	8	Inform all Tower personnel of changes in the equipment configuration or status that might affect the presentation or performance of the equipment.			
	9	Evacuate the Tower when winds reach 65 knots. However, the decision to evacuate can be made at any time the SC feels it is unsafe for employees to remain in the Tower, regardless of whether the winds have reached 65 knots.			
	10	Be responsible for any changes made to the Airport Lighting Panels.			
	11	Ensure any information pertaining to any Airfield Alert event or ATC Alert/ATC Limited/ATC Zero event is communicated to the Watch Supervisor in a timely manner.			

12	Assist personnel and open/close positions as traffic and staffing dictate.			
13	Ensure that visibility observations are taken and forwarded as appropriate.			
14	Ensure advisory information on bird activity is issued for fifteen (15) minutes from the last report or until observations or subsequent reports reveal the activity is no longer a factor.			
15	Notify the WS/SI of any braking action reports. Enter in the IDS.			
16	Ensure PIREPS are requested as required by FAA JO 7110.65. Disseminate PIREPS by entering into AISR or notifying AFSS and entering into the IDS. PIREPS that are received via FDIO but are applicable to our reporting area (within 50nm) should also be entered into IDS. In addition to entering the PIREP in the IDS, notify the SI as necessary. (Relay to MQY Tower when applicable).			
17	Ensure all pertinent significant weather advisories (SIGMETs/AIRMETs/ CWA) are broadcast. Ensure all pertinent significant weather advisories to include but not limited by SIGMETs, AIRMETs, CWAS and all other known or observed weather that may affect aircraft safety are broadcast.			
18	Notify the WS/SI when deicing procedures are implemented and terminated.			
19	Assist the WS/SI in reviewing the IDS information for accuracy, to include pertinent airfield NOTAMs.			
20	Review the ATIS voice text message (AVTM) screen for accuracy. For BNA RCCs, monitor the D-ATIS to ensure they have been added to the ATIS.			
21	Ensure the ATIS is updated and/or the information is disseminated IAW the FAA JO 7110.65 for events such as Low Level Wind Shear advisories, Unauthorized Laser Illumination events, bird activity, breaking action advisories, RVR values, or Unmanned Aircraft			
22	Inform the SI/WS when Cab Coordinator is opened or closed. When Cab Coordinator is closed, SC will assume the following duties:			
	*Act as the focal point for coordination between the TRACON and Tower, with the purpose of reducing distractions at the Local Control position and surveilling critical areas of the airport operations.			
	*Coordinate with the appropriate TRACON position(s):			
	*Change(s) in the runway configuration.			
	*When additional spacing is required in the approach interval or when the interval can be decreased.			
	*When official visibility changes from IFR to VFR or VFR to IFR.			
	*Coordinate with the SI/WS when opposite direction operations are approved			

	*Determine, after conferring with Local Control, when practice approaches to other than the active runway(s) may be made.			
23	TARMAC Delay Operations:			
	*In response to the "Three / Four-Hour TARMAC Rule", if a request is made by the pilot-in-command of an aircraft to return to the ramp, gate, or alternate deplaning area, make every attempt to accommodate the request in a timely manner. The pilot's request should include the reason, such as "tarmac related delay," and the time by which the aircraft must be airborne or deplane passengers. If unable to accommodate the request due to the request causing a significant disruption of service, inform the pilot of the reason why. A significant disruption of service may include but is not limited to:			
	*Accommodating a tarmac delay aircraft would require airborne holding that would result in delays of 15 minutes or more.			
	*Use of an active runway to taxi a tarmac delay aircraft that would preclude the use of that runway for arrivals or departures and result in arrival/departure delays of 15 minutes or more.			
	*Taxi of tarmac delay aircraft would result in placing other aircraft in jeopardy of violating the "Three-hour Tarmac Rule."			
	*Taxi of tarmac delay aircraft would displace departure aircraft already in a reportable delay status and result in delays in excess of an additional 15 minutes.			
	*The taxi of a tarmac delay aircraft to the ramp, gate, or alternate deplaning area would result in a diversion or the airborne holding of more than three aircraft.			
	*When a tarmac delay taxi request is received, SC, SI or WS must verbally notify the overlying ARTCC TMU. Additionally, when a facility is notified that an aircraft has exceeded the "Three-Hour TARMAC Rule," the Washington Operations Center (WOC) must be notified through the ROC as soon as possible. Notification should include the date and time of the occurrence and the identification of the aircraft involved.			
	*Requests to taxi for deplanement must be documented on FAA Form 7230-4, indicating the time the request was made.			
I certify that all items on this checklist have been completed and/or discussed.				
Note: Please return to Training Department when complete.				
(Op Initials)		Signature		Date
Trainee:				
OS/OM:				

Controller-In-Charge / SI Position OJT Checklist - TRACON				
Name of SI Trainee:		OM/OS	Trainee	Date
A. Operational Oversight				
1	Ensure available resources are deployed appropriately in the TRACON. When resources are simultaneously utilized in both operational areas, the SI must coordinate with the WS to ensure shared awareness of facility configuration and utilization of resources. In situations where resources are limited and a priority of position assignment must be established, the WS must determine how available resources are deployed.			
2	Monitor current and anticipated air traffic volume and complexity, including weather and other surface or airborne constraints, and assign available personnel in the most optimal manner to support the integrity of the operation. To the extent traffic volume and staffing permits, position assignments should be rotated among the qualified employees to allow them to work operational positions and support completion of other duties including on-the-job training, briefings, meeting attendance, administrative work and non-operational tasks, etc.			
3	Only work an operational position while assigned SI duties on a limited basis during periods of low air traffic activity. If the SI is engaged in an activity which will interfere with or preclude the performance of operational area supervision duties, delegate the activity or assign another qualified individual to supervise the operational area.			
4	Open TRACON Coordinator positions (CII/CI2, etc.) when traffic volume and/or complexity warrant additional personnel to supplement operational communication/coordination or perform other duties of those positions.			
5	Coordinate with WS regarding additional resource needs and prior to any assignment of overtime. If immediate action is required (due to end of shift, unplanned absence of personnel, excessive volume/complexity/workload, etc.) and the WS cannot be reached, use good judgment in resolving resource shortages and/or assigning overtime.			
6	Assign personnel to accomplish on-the-job training (OJT) and related activities according to current facility and/or organizational guidance.			
7	Ensure personnel are provided adequate non-position time to complete required operational briefings and training.			

	8	Ensure that breaks are administered in their assigned areas IAW national directives, contractual agreements, and locally developed facility directives/ agreements so as to promote the efficiency of the Agency.			
	9	Know the whereabouts of employees to ensure their availability for position assignments. SI must notify the WS prior to authorizing personnel to leave the facility.			
	10	Ensure PIREPS are solicited and disseminated as required by FAA JO 7110.65. Disseminate PIREPS by entering into AIS-R or relaying to ZME-FD and entering information into the IDS. PIREPS that are received via FDIO but are applicable to BNA reporting area (within 50nm) must be entered into the IDS. In addition to entering PIREPs in the IDS, notify the SC/SI or WS as necessary and relay to MQY Tower when applicable.			
	11	Ensure all pertinent significant weather advisories to include but not limited by SIGMETS, AIRMETS, CWAS and all other known or observed weather that may affect aircraft safety are broadcast.			
	12	Implement Operational Contingency Plans as required.			
	13	Accommodate Special Operations and conduct monitoring of Presidential Aircraft IAW Agency directives.			
	14	Configure, monitor, and report equipment status including changes to the WS position. Log all equipment outages on FAA Form 7230-4, Facility Log, and update the IDS. Inform the SC/CIC and all controllers in the TRACON of changes in equipment status/configuration which may adversely affect the presentation or performance of that equipment.			
	15	Eliminate distractions in the operating quarters by avoiding activities or tasks that may lead to distraction. Examples include: Supervisory administrative tasks that distract from oversight of the operation and can be otherwise accomplished, OJT debriefings, Training Team meetings, other than "pre-duty" briefings, etc. Additionally: *Breaks should be accomplished outside the operating quarters. *Tours must not be allowed in the operation if they cause a distraction. *Non-operational material should be removed from the operating quarters.			
	16	Make on-the-spot corrections and stop instances of inappropriate behavior, harassment, etc., then report actions/outcomes to WS. (Note: On-the-spot corrections are not considered an evaluation of performance and are required of both OS and CICs.)			
B. Resource Management					
	1	Designate a SI/CIC during periods of absence from the TRACON IAW JO 7210.3, 2-6-2			

	2	Assign personnel and activate positions as traffic and staffing dictate.			
	3	The day shift SI, after coordination with WS, will relay to ZME TMU, the runway configuration and Arrival Acceptance Rates, via NTML. If unavailable, relay the configuration and rate via the 119-72 or 77 line no later than 0700L.			
	4	Complete the traffic count from the night before and start a daily spreader.			
	5	When the approach control functions are returned to the TRACON with the arrival of the day shift personnel, the TRACON Supervisor/CIC must: *Transfer control of the ASR-9 and Mode S to the TRACON. *Advise ZME data to route the FDIO data IAW the new configurations. *Advise the appropriate ZME sectors of the transfer. *Enter the appropriate STARS configuration. *Transfer control of the traffic between the Tower and the TRACON using the Position Relief Checklist.			
	6	Keep the ZME ARTCC Traffic Management Coordinator advised of the runway configuration and approaches in use at the primary airport.			
	7	When notified by SC/CIC that deicing procedures are in effect notify ZME ARTCC of the effect on arrival and departure flow rates.			
	8	Ensure the accuracy of the IDS and pertinent NOTAMs are displayed.			
	9	Refer to and comply with the checklists in BNA SOP Appendix 2 for: *Runway Changes (Appendix 2-7) *Runway Closures (Appendix 2-8) *Runway Openings (Appendix 2-9)			
	10	Whenever practicable, the SI position will be plugged in with a headset via the ETVS SI position.			
	11	Inform the SC/CIC of the position configuration in the TRACON and procedures that might affect the operation of the Tower such as: *Low Activity Procedures *Opening/Closing Positions			
	12	Generate KBNA arrival strips in the TRACON only when: *Multiple positions are operating on FSL only or DSA only mode either for one hour or greater or if by unscheduled outage [or] *Operating on a single RADAR feed. *QOJ (Joelton Long Range RADAR) without ASR-9 for either one hour or greater or if by unscheduled outage [or] *Operation on an ASR-9 single channel without QOJ LRR available either for one (1) hour or greater or if by unscheduled outage.			
C. Administrative Functions					

1	Complete specific SI tasks by shift as described in BNA SOP Chapter 2, Appendix 2-3 for day shift; Appendix 2-4 for evening shift; and Appendix 2-5 for midnight shift.			
2	Coordinate leave, shift change and other schedule-related requests with the WS.			
3	Forward operationally-related medical information to the WS.			
4	Forward public concerns including noise complaints to the WS.			
5	Comply with contractual requirements.			
I certify that all items on this checklist have been completed and/or discussed. Note: Please return to Training Department when complete.				
(Op Initials)		Signature		Date
SI Trainee:				
OM or OS:				

Controller-In-Charge OJT Checklist - MIDSIFT CIC					
Name of CIC:			OJT or OS	DEV/ CPC-IT	DATE
A.	Resource Management				
	1	Primary Focus - Provide full, safe ATC services			
	2	Position configuration & staffing = Volume and Workload			
	3	Resources in place prior to increase in volume/complexity			
	4	OS/CICs and ATCS proactively work together to avoid position overload			
	5	Other items covered:			
B.	Managing the Operation				
	1	ATCS working the mid-shift must be familiar with:			
		a. Logging entries			
		b. One person mid-shift procedures			
		c. Mid-Shift fatigue management/breaks			
		d. Procedures and policies for combining the TRACON to Tower Cab			
		e. Procedures and policies for consolidating the facility to one position in the tower			
		f. Procedures for ensuring correct Cru-ART entries			
	2	Critical CIC functions - operational oversight, ensuring shared awareness, risk-based decision-making, identifying/communicating issues, proactively decombining positions			
	3	Watch Checklist duties, Daily Log responsibilities, Shift Tasks, NIDs, NOTAMs, WX and AISR, GENOTs, Entering departure/arrival rate into NTML, other Facility data			
	4	Compliance w/Pre-Duty WX briefings, CEDAR MBIs, SIAs, strip mgmt, memory aids, Complete PRBs, PIREP/WX/NOTAM dissemination			
	5	Staffing considerations, training needs (OJT, briefings, eLMS)			
	6	Minimizing distractions, handsets vs. headsets			
	7	TMU Initiatives			
	8	Review Top 5 Safety Issues, Agency/BNA safety initiatives, ABCs, etc.			
	9	Special activities (Flight Check, Photo Missions, Overhead approaches, UAS, VIP, etc.)			
	10	General coordination with SC, MNAA, TNARNG, etc.			
	11	Upward reporting and required notifications (e.g., DEN, ROC, ATCSCC, ZME OMIC, BNA Mgmt, etc.)			

	12	Airport surface issues: closures and construction, maintenance, mowers, terminal cranes and obstructions, ILS-CA/RSAs, Group V, SMGCS (Closures remain in effect until NOTAM times out; verbal confirmation does NOT count)			
	13	RWY/APCH in use, runway changes, opening/closing checklist, ODO			
	14	Use of IDAC, complying with Traffic Management Initiatives (EDCTs, ESPs, GS, etc.), coordination with ZME TMU, missed release times			
	15	ARFF procedures, Alert 99's, Alert levels, FOD checks, etc.			
	16	ATC Orders/Directives: BNA SOP, 7110, 7210, 7610,)			
	17	S:\BNA AT OPS Share Orientation; Print copy of CIC Stage Training			
	18	Practice approaches for turbojets at BNA			
	19	Other items covered:			
C. Human Relations					
	1	Ensuring professionalism and positive work environment			
	2	Reporting requirements (Management, Accountability Board, EEO, etc.)			
	3	NATCA/FAA Contract/Professional Standards/RESPECT			
	4	HRPM Standards of Conduct			
D. Facility Security					
	1	Facility Access: video monitoring system, doors/gates, general security			
	2	Tower cab safety: stairs, attic/cat-walk, high winds/weather			
	3	Emergencies: evacuation vs .shelter in place, fire, bomb threat, etc.			
	4	Suspicious activities, possible terrorism, security incidents, reporting requirements			
E. Administrative					
	1	Time and Attendance (ART): Common entries, combining positions, shift certifications, unusual issues			
	2	Position log, personnel log, WX Observations log			
	3	WMT Scheduler			
	4	CEDAR - Daily Log, MBIs, FALCON			
	5	OS/CIC PC, CIC binder, bookshelf binders			
	6	Traffic count, delays, OPSNET			
	7	Other commonly used forms and documentation requirements			
	8	Contact flight surgeon during business hours for medicine questions; contact ROC after hours			
F. Equipment					
	1	Review facility directives for equipment configurations, malfunctions and maintenance such as:			

		a. Tech-Ops and MNAA coordinated outages			
		b. Maintenance outage (Initial vs Final coordination from AOCC)			
	2	National and local procedures for who and how to notify:			
		a. Real-time vs planned outages			
		b. Rapidly and efficiently recovering from equipment failures/glitches			
		c. Making equipment outage log entries and notifications			
		d. Responding to alarms			
		e. Restoring normal operations and switch to backup systems			
		f. Paper jams			
	3	RADAR panel to include Mode S operation			
	4	Demonstrate connecting battery and antenna to PETs			
G. Unusual Situations					
	1	ATC Alert/Limited/Zero, Go Bag, Contingency Plan			
	2	Occurrence Reporting (MOR), Safety Events and ATSAP			
	3	TCAS RA, Possible Pilot Deviations, NMACs, Public Inquiries			
	4	Inflight/ground-based aircraft emergencies (review priority of actions)			
	5	Significant Event Checklist and Staffing Trigger/ATC Limited/Zero form			
	6	Lost aircraft, ELT reports, INREQs/ALNOTs/SAR (ZME OMIC)			
	7	Laser Illumination, UAS, UFO, Bird Strike, airport security events			
	8	Accident/Incidents: Use of 8020-3 for call-out, 8020-9 (ROC)			
	9	Other items covered:			
I certify that all items on this checklist have been completed and/or discussed.					
Note: Please return to Training Department when complete.					
		(Op Initials)	Signature	Date	
Trainee:					
OS:					

Controller-In-Charge/WS Position OJT Checklist-Facility				
Name of WS Trainee:		OM/OS	Trainee	Date
A.	Operational Oversight			
1	Provide general oversight of both ATCT and TRACON operations, ensuring the combined facility delivers air traffic services in IAW Agency directives.			
2	Assume the responsibilities of ATCT or TRACON Watch Supervision when combined to the SI or SC position, or both. When either position is split, determine and communicate goals and requirements for ATCT and TRACON operations after consultation with SI and/or SC.			
3	Monitor the operation and maintain situational awareness including traffic volume/complexity/flows and area/facility resource needs.			
4	Resolve operational disagreements or discrepancies between the TRACON and the Tower, taking into account all available information.			
5	Monitor air traffic service delivery and (SI/SC) operational oversight and make on-the-spot corrections as necessary.			
6	Ensure on-the-job training is accomplished according to current organizational guidance.			
7	Assume or delegate (to SC/SI) the responsibilities of facility Traffic Management Unit and ensure completion of traffic count and delay reporting requirements.			
8	Provide oversight for Flight Check Operations including required operational briefings and documentation of briefing completion on Form 7230-4.			
9	Ensure timely and effective implementation of facility Operational Contingency Plans; act as the POC for communications and coordination during a OCP event.			
10	Provide advice on administrative and technical problems related to the operation.			
11	Monitor facility operational equipment, assure appropriate notification (AOCC, IT, etc.) of malfunctioning equipment as identified by SI or SC, and give or delegate authority for final approval of operational equipment shutdown.			
12	Review and evaluate data sources such as NIDS, CEDAR, AIS-R, etc., to ensure accuracy of NOTAMs, GENOTs and other operational information and make appropriate updates when changes occur. Ensure all pertinent NOTAMs that might restrict approach or landing (i.e. FICON values) are appropriately displayed and the appropriate operational position has the information.			

	13	Confirm accuracy of WMT Scheduler (or the current Agency Scheduling System) data for the current shift/day and certify Cru-X/ART after each shift.			
	14	Collaborate with other FAA facilities and civil/military organizations to coordinate work related changes affecting facility operations and inform SI/SC of any actions required or taken.			
	15	Respond to NAS Security Alerts and ensure appropriate handling of special operations and monitoring of presidential aircraft movement.			
	16	Complete other documentation, reports and/or functions as needed for operational continuity including any requirements not completed by previous shift WS.			
B. Resource Management					
	1	Ensure SI/SC/WS are opened as stand-alone positions to provide appropriate facility and operational area supervision. The specific, independent functions of the SI, SC and WS positions are essential to safe and efficient air traffic services and should be de-combined from other positions to the extent possible to support full, safe, and efficient air traffic service delivery, maximum situational awareness in each area, and timely assistance to air traffic control specialists.			
	2	Ensure available resources in both areas are deployed for optimal efficiency, review staffing for current and next shifts and address any issues, process employee work schedule-related requests and actions, taking into account projected operational and non-operational workload including special activities and events. Approve credit hours earned, excused absences, etc., and complete other resource management tasks as needed. Coordinate with SI/SC actions that impact their respective operations. (Note: Only Management can approve Excused Absence.)			
	3	Overtime assignments: The assignment of overtime may be necessary to ensure the ability of the facility to meet operational requirements (i.e., staffing necessary to provide safe, efficient, and effective air traffic control services with normal position workload and complexity).			
C. Administrative Functions					
	1	Assist the SI/SC to complete specific shift/watch tasks and the Watch Checklist as described in the BNA SOP and make entries in the 7230-4 as required.			
	2	Ensure appropriate processing and reporting of MORs, incidents and accidents, significant outages and potentially newsworthy/noteworthy events.			

	3	Ensure appropriate collection, reporting and/or archiving of operational shift data.			
	4	Process medical information as provided by SI/SC or operational employees. Communicate with RFS staff and coordinate medical status as appropriate. (If CIC, forward info immediately to facility management.) Do not assign administrative duties to medically-restricted personnel unless approved by Air Traffic Manager or designee.			
	5	Respond to/address any instances of inappropriate behavior provided by SI/SC, then document and upwardly report in a timely manner. (If CIC, forward info immediately to facility management.)			
	6	Represent the facility during non-administrative hours. Document and upwardly report complaints or other matters presented by customers, stakeholders or members of the public.			
I certify that all items on this checklist have been completed and/or discussed. Note: Please return to Training Department when complete.					
		(Op Initials)	Signature	Date	
WS Trainee:					
OM or OS:					

APPENDIX D: CURRENCY & FAMILIARIZATION

D-1. CURRENCY

Table D-1

JOB TITLE	TIME REQUIREMENT	MAINTAIN CURRENCY ON...
ATCS (including DEV and CPC-IT)	16 hours per calendar month (8 hours in Tower/8 hours in TRACON unless only certified in one area); Minimum 1 hour on each position certified on. Time working combined positions satisfies this requirement.	All positions certified on. FD/CD is required to be worked for 1 hour.
Support Specialist (who are required to maintain currency as a condition of employment)	8 hours per calendar month (4 hours in Tower/4 hours in TRACON unless only certified in one area); Minimum 1 hour each position	All positions certified on. FD/CD is required to be worked for 1 hour.
OS	8 hours per calendar month (4 hours in Tower/4 hours in TRACON unless only certified in one area); Minimum 1 hour each position	All positions certified on. FD/CD is required to be worked for 1 hour.

- A. Coordinator (CC/CI1/CI2), Controller-In-Charge, and OSIC positions do not have a currency requirement and time spent working those positions is not counted towards currency.
- B. Time spent performing on-the-job training (OJT) instruction is not counted toward operational currency.

- C. Time spent receiving OJT on combined positions, where the employee is certified on some of the combined positions, is not counted toward operational currency.
- D. Time spent conducting performance/certification skill checks, operational skills assessments, or any type of over-the-shoulder is not counted toward operational currency.
- E. Personnel not required to maintain operational currency will be required to maintain familiarity with each operating area. This can be accomplished through direct or indirect monitoring.
- F. Currency will be tracked by staff members each month and reported to the Operations Manager. The Operations Manager will notify the Operations Supervisor of any employees not operationally current. Any employee not operationally current must not work without an On-The-Job Training Instructor/Operations Supervisor plugged in with them until such time as the employee is recertified. Recertification must be completed on at least one position in each operational area in which currency is lost Tower and/or TRACON).

D-2. FAMILIARITY

- A. Employees required to maintain familiarity with the control room operations are: Air Traffic Manager, Operations Manager/Support Manager, and Support Specialists not required to maintain currency as listed in D-1.
- B. Those employees maintaining operational familiarity must complete at least one (1) hour of familiarization in the Tower and one (1) hour of familiarization in the TRACON each month, except Support Specialists will complete at least two (2) hours of familiarization in the Tower and two (2) hours of familiarization in the TRACON each month. This time will be recorded in the LDR each pay period.
- C. Familiarization may be achieved through either direct monitor or indirect monitor. Indirect monitoring may be accomplished via radar/audio playback tools or by being present in the operating quarters.
- D. Watch Supervision (WS Position) may be staffed by an Operations Manager (OM), Support Manager (SM), Operations Supervisor (OS), or Support Specialist (SS) who maintains familiarity, or an operational employee who meets the certification requirements described in Chapter 4. If not certified on the SI and/or SC, employees acting as WS must complete at least two (2) hours of familiarization in the Tower and/or two (2) hours of familiarization in the TRACON each month. Additionally, if employee assigned to the WS position is not certified on SI, SC or both, the positions not certified on must also be staffed.

Clearance Delivery/Flight Data (CD/FD) OJT Checklist				
Page 1 of 2				
Name:		OJT or OS	Trainee	DATE
A. Clearances & Phraseology				
1	Demonstrates use of standard phraseology.			
2	Correctly issues an IFR clearance.			
3	Correctly issues a SVFR clearance.			
4	Correctly issues a VFR/OTP clearance.			
5	Correctly issues a VFR clearance.			
6	Demonstrates the three ways of issuing amended clearances.			
7	Identifies revised clearances.			
8	Identifies/Issues PDR routes.			
B. Flight Plan Processing				
1	Demonstrates knowledge of local area and identifiers.			
2	Demonstrates knowledge of strip marking for pre-coordinated routes and altitudes			
3	Receives, processes and delivers flight plan information.			
4	Demonstrates ability to enter flight plans (on FDIO & STARS).			
5	Demonstrates ability to amend flight plan information.			
6	Coordinates flight processing errors.			
7	Process flight strips manually.			
8	Demonstrates ability to coordinate flight information with the appropriate facility/positions.			
9	Demonstrates knowledge of applicable computer-generated postings required by positions.			
10	Deliver appropriate strips to the OS/CIC.			
C. Equipment				
1	Demonstrates knowledge of Information Display Systems (IDS) and ability to make changes.			
2	Demonstrates knowledge and operation of Automated Terminal Information Service (ATIS) -- both manual ATIS and D-ATIS.			
3	Knows location of jacks and how to access backup communication equipment (PET-2000s)			
4	Demonstrates knowledge and use of ETVS.			

Clearance Delivery/Flight Data (CD/FD) OJT Checklist				
Page 2 of 2				
Name:		OJT or OS	Trainee	DATE
5	Demonstrates the replacement of paper for the printer and knows location of supplies for flight strip printers.			
6	Demonstrates knowledge of location of backup printers.			
7	Demonstrates knowledge of CRU-ART procedures			
8	Demonstrates knowledge of FDIO equipment.			
9	Demonstrates knowledge of TDLS			
10	Demonstrates knowledge of STARS keypack.			
11	Demonstrates knowledge of IDST.			
12	Demonstrates knowledge of First Aid Kit location			
D. Position Information				
1	Demonstrates knowledge/use of NOTAM information.			
	Demonstrates knowledge of weather reporting formats and ability to copy/read.			
2	Solicits/Distributes PIREPs as required.			
3	Ensures departure aircraft have required minimum information or ATIS.			
4	Implements appropriate TMU restrictions (EDCTs, Groundstops, etc.).			
5	Demonstrates understanding of sector configurations during a combined status.			
6	Implements Gate Hold procedures.			
7	Conducts effective and complete coordination with other positions.			
8	Keeps the OS/CIC advised of all pertinent information.			
9	Conducts complete relief briefings.			
10	Demonstrates knowledge of which frequency is given dependent on runway configuration.			
I certify that all items on this checklist have been completed and/or discussed.				
Note: Please return to Training Department when complete.				
(Op Intials)		Signature	Date	
Trainee:				
OS:				

APPENDIX E-2

Ground Control (GC) OJT Checklist				
Page 1 of 3				
Name:		OJT or OS	Trainee	DATE
A. Utilizes Standard Phraseology				
1.	States assigned runway.			
	a. For an intersection departure			
	b. Hold short of ILS critical area when necessary.			
2.	Issues detailed taxi routes.			
	a. States runway crossing point			
	b. Crosses only one runway per transmission			
	c. Verifies aircraft/vehicle hold short readback			
3.	RVR and RCC requirements and phraseology.			
	a. RVR values of 6000 or less			
	b. "When to issue" requirements			
	c. Issued regardless of reading when vis is 1 mile or less			
	d. Issued to arrivals AND departures			
	e. Phraseology 7110.65 2-8-3			
4.	Ensures that departure aircraft have required minimum information or ATIS.			
	a. When ATIS is updated			
5.	Solicits and distributes PIREPs as required.			
	a. Relays information to Local or C.D.			
B. Effective Coordination				
1.	Advises Local Control when crossings are complete.			
	a. Must state where crossing will be			
	b. Must advise Local of intersection departures			
	c. Must advise Local when taxiing to a previously inactive runway.			
2.	Assists Local Control in scanning the runway environment.			
	a. Understands the importance when 13/31 are active			
3.	Verifies aircraft/vehicle position, as required.			
	a. Monitoring of weather conditions to protect ILS critical areas.			
C. Equipment				
1.	Information Display Systems and ability to make changes.			
2.	Demonstrates the proper use of ETVS (changes from Main to Standby)			
3.	Wind and altimeter/Digital Altimeter Setting Indicator (DASI) instruments.			
4.	Demonstrates how to operate RVR			
5.	Demonstrate knowledge and use of TDWR			
6.	Demonstrates how to operate Integrated Departure Scheduling Tool (IDST)			
7.	Demonstrates knowledge and use of Memory Aids			
8.	Demonstrates knowledge and use of backup equipment.			
	a. Pet 2000 radios			
	b. FAA orange jacks			
	c. Light Gun			

APPENDIX E-2

Ground Control (GC) OJT Checklist				
Page 2 of 3				
Name:		OJT or OS	Trainee	DATE
D. Position Information				
1.	Demonstrates airfield knowledge			
	a. Runways, taxiways, and taxi routes			
	b. FBOs, hangars, customs, firehall, etc.			
	c. Areas of non-visibility, there are 8 on the field			
	d. Airfield equipment, glideslope shack, loc shack, RVR, RADAR site			
	e. ILS critical areas			
	f. Runway Safety Areas			
	g. Bomb threat area			
	h. Hazardous Cargo area			
	i. Runway 13/31 Status cards			
	j. Deicing areas and procedures			
	k. Blast Fences			
	l. Runway lengths			
	m. No taxi areas for 2C, 20C, 13, 31, 2R, K, H			
	n. Restrictions for heavy departures off 31 with aircraft on H, 2R			
	o. Field elevation			
	p. Tower height			
2.	Demonstrates knowledge of emergency procedures.			
	a. All items that should be forwarded to Airport Ops			
	b. Definition of OpsFod, Alert1, Alert2, Alert3, Alert 99			
	c. Airport Command and their responsibilities			
	d. When the runways close			
	e. Who declares the alert over			
	f. Who reopens the runway			
3.	Effectively processes FDIO flight strips and aircraft information.			
	a. Proper use of PDC/CPDLC			
	b. Proper use of PDR			
4.	Demonstrates knowledge of wake turbulence requirements and plans accordingly. (From an intersection especially.)			
5.	Implements appropriate Traffic Management Unit (TMU) restrictions (EDCTs, MIT, etc.)			
	a. Who to contact for release (IDAC, ZID TMU)			
	b. Advise OS/CIC of delays that need to be recorded			
	c. 5 min before and 5 min after EDCT releases			
6.	Keeps the OS/CIC advised of all pertinent information.			
7.	Conducts complete position relief briefings.			

APPENDIX E-2

Ground Control (GC) OJT Checklist		
Page 3 of 3		
I certify that all items on this checklist have been completed and/or discussed.		
Note: Please return to the Training Department when complete.		
(Op Initials)	Signature	Date
Trainee:		
OS:		

LC1/LC2 OJT Checklist					
Page 1 of 3					
Name:			OJT or OS	Trainee	DATE
A. Phraseology					
1	For intersection departure.				
2	The issuance of wake turbulence advisories				
3	For issuing MSAW alerts, wind-shear information, safety alerts and bird advisories.				
4	Clearance for helicopter arrival/departure				
5	a. BNA/Bears Den				
	b. HEMS MOCA				
	c. Military helicopters				
6	Clearance for traffic entering, exiting, or transiting airspace				
7	For intersecting runway departures and arrivals				
8	Men and/or equipment beside the runway				
9	For go arounds and low approaches/touch and gos				
10	Low altitude alerts/Safety Alerts				
11	Line Up and Wait/Hold Short				
12	Tailwinds				
13	RVR's				
14	Braking action				
15	Visual separation				
16	Runway crossings by Ground Control				
B. Separation					
1	Knowledge of the aircraft categories and describes examples of aircraft included in each category.				
	a. Category1/same runway				
	b. Category2/same runway				
	c. Category3/same runway				
	d. Small				
	e. Small+				
	f. Large				
	g. Heavy/B757				
	h. Opposite direction departure and arrival (flight check)				
	i. Line up and wait with traffic on final				

LC1/LC2 OJT Checklist				
Page 2 of 3				
Name:		OJT or OS	Trainee	DATE
2	Knowledge of SOP and LOA requirements for HELO OPS in ATCT airspace			
3	Correct application of visual separation.			
4	Correct application of anticipated separation.			
5	IFR separation required for successive departures.			
6	IFR separation required for arriving and departing aircraft for the same runway.			
	a. When the weather is IFR and arrival cannot be seen			
	b. When the weather is VFR			
7	Proper separation between a departing or arriving helicopter and another helicopter.			
8	Proper separation for aircraft using intersecting runways.			
9	When a small aircraft may take off behind a departing large aircraft from an intersection on the same runway.			
10	Proper separation between an arriving aircraft and another aircraft on the same runway or a parallel runway with a displaced threshold.			
11	Wake turbulence separation standards.			
	a. Intersection departures			
	b. Opposite direction			
	c. Low/missed approach			
	d. At the threshold			
	e. Small departing behind full length			
	f. Rolling takeoff			
	g. When it is waiveable			
12	Correct runway for military F/A/T aircraft			
13	Clear of the runway definition			
C. Effective Coordination				
1	With Ground Controller			
	a. Specify where to cross a runway and runway number			
	b. OPS on active runways			
2	With Arrival/Final Controller			
3	With Cab Coordinator/Supervisor			

LC1/LC2 OJT Checklist					
Page 3 of 3					
Name:			OJT or OS	Trainee	DATE
	4	With Adjacent Towers			
D. Equipment					
	1	Use of STARS & knowledge of its functions.			
	2	Use of TDWR			
	3	Use of EFSTS (strip scanner)			
	4	Use of approach lighting systems and where to find requirements			
	5	Use of airport lighting systems and where to find requirements			
	6	Use of Memory Aids			
E. Position Information					
	1	Demonstrates the priority of service provided between aircraft practicing instrument approaches and itinerant aircraft.			
	2	Demonstrates the application of when arriving touch-and-go, stop-and-go and low-approach aircraft are considered departing aircraft.			
	3	Demonstrates when a low approach of not less than 500 feet above the runway may be authorized.			
	4	Demonstrates the procedures governing an overhead approach.			
	5	Demonstrates the ability to comply with Traffic Flow Management Initiatives.			
	6	Demonstrates knowledge of missed approach procedures.			
	7	Conducts complete relief briefings.			
	8	How to take Tower visibility and where to find the chart.			
	9	Understands CAT II and CAT III operations			
	10	RVR, how to change runways, how and when to issue			
	11	Understands SVR/VFR-on-Top			
	12	Understands Special/Military Operations/Other			
	13	Understands FSL/DSA and what the differences are.			
I certify that all items on this checklist have been completed and/or discussed.					
Note: Please return to the Training Department when complete.					
(Op Initials)		Signature	Date		
Trainee:					
OS:					

APPENDIX E-4

Cab Coordinator (CC2) OJT Checklist					
Page 1 of 2					
Name:			OJT or OS	Trainee	DATE
A.	Procedures and Phraseology				
	1	Utilizes proper phraseology when coordinating over inter/intra-phone.			
	2	Initiates and accepts radar hand-offs and point-outs.			
	a.	Transfers radar identification.			
		1. Physically points to target on receiving controller's display.			
		2. Uses landline voice communications.			
		3. Uses automation capabilities (e.g., automated point-outs).			
	b.	Uses proper procedures and phraseology in accomplishing hand-off and point-outs or issuing traffic restrictions and in relaying information.			
		1. Primary target.			
		2. Limited data block.			
		3. Full data block.			
	3	Issues departure clearances.			
	a.	Issues clearance items in the correct order.			
	b.	Issues specific departure instructions as needed.			
	c.	Uses proper phraseology when issuing clearances to Flight Service.			
	d.	Uses abbreviated departure clearances when appropriate.			
	4	Provides local beacon code assignments to IFR aircraft.			
	5	Ensures that code assignment provides Minimum Safe Altitude Warning (MSAW) processing.			
	6	Provides assistance to aircraft experiencing in-flight emergencies.			
	7	Coordinates all pertinent information to the appropriate facility sectors and the Front Line Manager.			
	8	Recognizes sector saturation and employs procedures to prevent or alleviate this control problem.			
	a.	Informs the Front Line Manager.			
	b.	Coordinates with adjacent sectors.			
	9	Maintains board management.			
	a.	Uses proper strip marking procedures.			
	b.	Retains only necessary and current flight progress strips and information.			
	10	Enters flight data into computer, as required.			
B.	Equipment				
	1	Demonstrates working knowledge and functional use of Flight Data Input/Output (FDIO).			
	2	Demonstrates working knowledge of TSD.			
	3	Demonstrates working knowledge of ETVS, phones			

APPENDIX E-4

Cab Coordinator (CC2) OJT Checklist					
Page 2 of 2					
Name:			OJT or OS	Trainee	DATE
	4	Demonstrates working knowledge of TFMS.			
	5	Demonstrates working knowledge of TDWR.			
	6	Demonstrates working knowledge of IDST			
	7	Demonstrates working knowledge of TDLS.			
	8	Use of approach lighting systems and where to find requirements			
	9	Use of airport lighting systems and where to find requirements			
	10	Knows location of jacks and how to access back-up communication systems (PET-2000s).			
C. Position Information					
	1	Understands duties when a Coordinator is utilized.			
	2	Conducts position relief briefings in accordance with directives.			
I certify that all items on this checklist have been completed and/or discussed.					
Note: Please return to Training Department when complete.					
(Op Initials)		Signature	Date		
Trainee:					
OS:					

DRW & NONRADAR OJT CHECKLIST				
Page 1 of 4				
Name:		OJTI or OS	Trainee	DATE
A. Phraseology				
	1	Uses correct phraseology when issuing approach clearances:		
		a. Visual approach clearance (Airport in sight and/or preceding traffic in sight)		
		b. ILS approach clearance		
		c. RNAV / GPS / RNP approach clearance		
		d. Vectors off RNAV STAR/SID		
		e. Rejoining an RNAV STAR/SID		
	2	Terminating Radar service		
		a. VFR to tower controlled airport		
		b. VFR to non-controlled airport		
		c. IFR to non-tower airport		
	3	Holding aircraft (published & unpublished)		
	4	Verbal (manual) hand-Off		
	5	Verbal (manual) point out		
	6	Traffic alerts / safety alerts		
		a. Merging targets		
		b. Obstructions		
	7	Inter-/intra-line communication		
	8	RVR's		
	9	Use of the word "heavy"		
10	Weather deviation and description			
11	Clearance and release off satellite airports			
	a. Tower controlled airport			
	b. Non-tower airport			
B. Separation				
	1	Merging target procedures		
		a. Presidential		
		b. Turbojets		
	2	Wake turbulence spacing and advisory requirements		
		a. At the runway threshold.		
		b. Within 2500ft laterally.		
		c. In trail/climbing/descending through		
		d. Visual separation		
	3	Simultaneous dependant parallel approach procedures		
		a. Minima between RNAV and RNAV		

DRW & NONRADAR OJT CHECKLIST				
Page 2 of 4				
Name:		OJTI or OS	Trainee	DATE
	b.	Minima between RNAV and ILS		
	c.	Minima between ILS and ILS same and parallel		
	d.	When tower is responsible for separation		
	4	Application of passing & diverging		
	5	Application of visual separation (enroute & on approach)		
	a.	Pilot applied requirements		
	b.	Controller applied requirements		
	6	Correct utilization of vertical separation on opposing base-legs		
	7	VFR-on-top separation		
	8	Formation flights		
	9	Obstructions		
	10	Vectors below the MVA		
	11	Multiple departure releases at the same time at satellite airports		
12	Multiple arrivals at the same satellite airport			
13	Vanderbilt TN38 departures and JWN aircraft			
C. Procedures				
	1	Primary/secondary Radar ID methods & questionable ID		
	2	Initiating and/or accepting an automated point-out		
	3	Initiating and/or accepting an automated handoff		
	4	Initiating and/or accepting a non-radar data block		
	5	Pressurization issues on high-climbing departures		
	6	Final approach course intercept requirements		
	a.	Inside of a 7 mile final		
	b.	Outside the approach gate		
	c.	Vectors for straight in RNAV Y or Z		
		requesting RNAV Z		
	e.	Vectors for a visual approach		
f.	Weather minima at BNA for vectoring for visual approaches			
g.	RNAV approaches inside/outside 90 degrees of the IF			
7	Handling missed approach or go-arounds			
8	Complying with TMU initiatives (ie MIT, etc)			
9	Manual handoff			
10	Transfer of communications/control			
11	Look and go through ARW			
D. Letters of Agreement				
	1	Ft Campbell		
	a.	Control for turns and descent		

DRW & NONRADAR OJT CHECKLIST				
Page 3 of 4				
Name:		OJTI or OS	Trainee	DATE
		b. Arrival altitudes		
		c. Overflights		
		d. Flash through from ZME		
	2	Memphis Center		
		a. Arrivals to BNA		
		b. Arrivals to satellite airports/to and from ZME		
		c. Control of different type aircraft entering our airspace		
		d. Memphis Center control of aircraft in our airspace		
		e. Vectors for a visual approach		
		f. Point out hot spots		
	3	Vanderbilt Lifeflight		
	4	Air 4, 5 Metro		
	5	Nashville Airport OPS		
	E. Special Operations / Handling			
		1	Military operations	
b. Fighter/Attack/Tactical runway assignment				
c. Overhead				
2		Satellite airport operations		
		a. Tower controlled airport		
		b. Non-tower airport		
3		Aerial photography operations		
4		Parachute Jumping Operations		
5		Priority aircraft		
		a. Presidential		
		b. Medevac		
		c. Emergency		
		d. Law enforcement/all types		
6		Emergency aircraft		
		a. Lost aircraft		
		b. VFR encountering IFR conditions		
		c. Who may declare an emergency		
7		Minimum fuel		
8		Hijack/bomb threat		
9		Aircraft responding to TCAS/RA		
		a. Controllers responsibility for separation		
	b. Pilots responsibility for separation			
	c. Conflicts with other aircraft during the RA			

DRW & NONRADAR OJT CHECKLIST				
Page 4 of 4				
Name:		OJTI or OS	Trainee	DATE
10	Aircraft deviating around weather			
11	Icing conditions			
12	PIREP dissemination/collection			
13	Law enforcement operations & tracking			
14	Aircraft not complying with instructions (route/alt clearance)			
15	Vanderbilt HEMS MOCA			
16	Vanderbilt HEMS point to point			
F. Equipment				
1	Be able to utilize STARS functions			
2	Change from STARS FSL to DSA & understand the difference			
3	Understands requirement for displaying weather			
4	Be able to navigate through the IDS			
5	Demonstrate changing the RVR equipment			
6	Demonstrate use of back-up communication equipment			
Non-Radar				
A.	Performs appropriate changeover procedures from radar to non-radar as per contingency plan.			
B.	Demonstrates ability to transition from FSL to DSA.			
C.	Understands the differences between in QOJ Radar vs. BNA Radar.			
I certify that all items on this checklist have been completed and/or discussed.				
NOTE: Return this form to the Training Department when completed.				
(Op Initials)		Signature		Date
Trainee:				
OS:				

APPENDIX E-6

ARW OJT Checklist					
Name:			OJT or OS	Trainee	DATE
A.	Phraseology				
	1	Approach instructions.			
		a. BNA arrival			
		b. Satellite airport arrival			
B.	Separation				
	1	Releases off JWN and BNA tower airspace			
	2	Overflights			
C.	Procedures				
	1	Altitudes released to FRE/FRW			
	2	Blocking airspace for arrivals into M91 and JWN			
D.	Letters of Agreement				
	1	ZME			
	2	HOP			
	3	JWN			
E.	Special Operations / Handling				
	1	Feeding Final on the downwind			
I certify that all items on this checklist have been completed and/or discussed.					
NOTE: Return to Training Department when completed.					
(Op Initials)		Signature		Date	
Trainee:					
OS:					

APPENDIX E-7

DRE OJT Checklist					
Name:			OJT or OS	Trainee	DATE
A.	Phraseology				
	1	Clearance and release off satellite airports			
		a. Releases off tower controlled airport other than per LOA			
		b. Releases off tower controlled airport when automation OTS			
		c. Releases using GCO			
		d. VOR-DME-A approaches XNX			
B.	Separation				
	1	Releases off MQY and BNA tower airspace			
	2	Instrument approaches to MQY and MBT releases			
	3	Overflights and MQY			
	4	RNAV 36 approaches to MBT and ZME center airspace			
	5	Hems MOCA and ZME			
		a. Arrivals/departures at TN38			
		b. Altitudes to feed ZME at PESNE			
C.	Procedures				
	1	Radar ID for MQY departures			
	2	Blocking airspace for arrivals into SYI			
	3	VOR-DME-A approaches into XNX			
	4	Look and go procedures through ARE			
D.	Letters of Agreement				
	1	MQY			
E.	Special Operations / Handling				
	1	HEMS departures off M54			
I certify that all items on this checklist have been completed and/or discussed.					
NOTE: Return to Training Department when completed.					
(Op Initials)		Signature	Date		
Trainee:					
OS:					

APPENDIX E-8

ARE OJT Checklist					
Name:			OJT or OS	Trainee	DATE
A.	Phraseology				
	1	Approach instructions.			
		a. BNA arrival			
		b. Satellite airport arrival			
B.	Separation				
	1	Releases off MQY and BNA tower airspace			
	2	Overflights			
C.	Procedures				
	1	Altitudes released to FRE/FRW			
	2	Blocking airspace for arrivals into SYI			
	3	VOR-DME-A approaches into XNX			
D.	Letters of Agreement				
	1	ZME			
	2	MQY			
E.	Special Operations / Handling				
	1	Feeding Final on the downwind			
I certify that all items on this checklist have been completed and/or discussed.					
NOTE: Return to Training Department when completed.					
(Op Initials)		Signature		Date	
Trainee:					
OS:					

APPENDIX E-9

SRE OJT Checklist					
Name:			OJT or OS	Trainee	DATE
A. Phraseology					
	1	Clearance and release off satellite airports			
		a. Releases off tower controlled airport other than per LOA			
		b. Releases off tower controlled airport when automation OTS			
		c. Releases using GCO			
		d. VOR-DME-A approaches into XNX			
	2	Holding instructions when multiple satellite airport arrivals			
B. Separation					
	1	Releases off MQY and BNA tower airspace			
	2	Instrument approaches to MQY and MBT releases			
	3	Overflights and MQY			
	4	RNAV 36 approaches to MBT and ZME center airspace			
	5	Hems MOCA and ZME			
		a. Arrivals/departures at TN38			
		b. Altitudes to feed ZME at PESNE			
C. Procedures					
	1	Radar ID for satellite departures, tower and non-tower			
	2	Blocking airspace for arrivals into SYI			
	3	VOR-DME-A approaches into XNX			
D. Letters of Agreement					
	1	MQY			
	2	ZME			
E. Special Operations / Handling					
	1	HEMS departures off M54			
I certify that all items on this checklist have been completed and/or discussed.					
NOTE: Return to Training Department when completed.					
(Op Initials)		Signature		Date	
Trainee:					
OS:					

APPENDIX E-10

FRE/FRW OJT Checklist					
Name:			OJT or OS	Trainee	DATE
A.	Phraseology				
	1	Approach Clearance			
		a. Visual/RNAV Visual			
		b. Instrument (ILS/VOR/RNAV/etc)			
	2	RVR			
	3	Braking action, runway conditions			
B.	Separation				
	1	Blocking for releases off MQY, JWN, VDY, BNAT			
	2	Blocking for instrument approaches to MQY, JWN			
	3	Hems MOCA			
	4	Reduced runway separation			
	5	RNAV separation (RNV/RNV, RNZ/RNV, RNY/RNZ, etc)			
	6	RWY 20R/20L, RWY 2R/20L			
	7	RWY 2L/2C, RWY 20R/20C			
C.	Procedures				
	1	Opposite base separation			
	2	Opposite RNAV arrivals			
	3	Control for turns and descent on base legs			
D.	Special Operations / Handling				
	1	HEMS MOCA			
I certify that all items on this checklist have been completed and/or discussed.					
NOTE: Return to Training Department when completed.					
(Op Initials)		Signature	Date		
Trainee:					
OS:					

RADAR Coordinator (CI1) OJT Checklist					
Page 1 of 2					
Name:			OJT or OS	Trainee	DATE
A.	Procedures and Phraseology				
	1	Utilizes proper phraseology when coordinating over inter/intra-phone.			
	2	Initiates and accepts radar hand-offs and point-outs.			
	a.	Transfers radar identification.			
		1. Physically points to target on receiving controller's display.			
		2. Uses landline voice communications.			
		3. Uses automation capabilities (e.g., automated point-outs).			
	b.	Uses proper procedures and phraseology in accomplishing hand-off and point-outs or issuing traffic restrictions and in relaying information.			
		1. Primary target.			
		2. Limited data block.			
		3. Full data block.			
	3	Issues departure clearances.			
	a.	Issues clearance items in the correct order.			
	b.	Issues specific departure instructions as needed.			
	c.	Uses proper phraseology when issuing clearances to Flight Service.			
	d.	Uses abbreviated departure clearances when appropriate.			
	4	Provides local beacon code assignments to IFR aircraft.			
	5	Ensures that code assignment provides Minimum Safe Altitude Warning (MSAW) processing.			
	6	Provides assistance to aircraft experiencing in-flight emergencies.			
	7	Coordinates all pertinent information to the appropriate facility sectors and the OS/CIC.			
	8	Recognizes sector saturation and employs procedures to prevent or alleviate this control problem.			
	a.	Informs the OS/CIC			
	b.	Coordinates with adjacent sectors.			
	9	Maintains board management.			
	a.	Uses proper strip marking procedures.			
	b.	Retains only necessary and current flight progress strips and information.			
	10	Enters flight data into computer, as required.			
B.	Equipment				
	1	Demonstrates working knowledge and functional use of Flight Data Input/Output (FDIO).			
	2	Demonstrates working knowledge of ETVS, phones.			
	3	Demonstrates working knowledge of TFMS.			

CI1 OJT Checklist					
Page 2 of 2					
Name:			OJT or OS	Trainee	DATE
	4	Demonstrates working knowledge of TDWR.			
	5	Demonstrates working knowledge of IDST			
	6	Demonstrates working knowledge of TDLS.			
	7	Demonstrates working knowledge of TSD.			
	8	Knows location of jacks and how to access back-up communication systems.			
C. Position Information					
	1	Demonstrates an understanding of sequencing of arrivals.			
	2	Understands duties when a Coordinator is utilized.			
	3	Conducts position relief briefings in accordance with directives.			
I certify that all items on this checklist have been completed and/or discussed.					
Note: Please return to Training Department when complete.					
(Op Initials)		Signature		Date	
Trainee:					
OS:					

Data Coordinator (CI2) OJT Checklist

Trainee Name:		OJT or OS	Trainee	DATE
1	Demonstrates knowledge of local area and satellite identifiers.			
2	Demonstrates knowledge of strip marking for pre-coordinated routes, airports with required release times, and appropriate altitudes (Direction of flight and sat. arrivals)			
3	Correctly enters/amends flight plans (on FDIO & STARS).			
4	Delivers strips to appropriate positions.			
5	Demonstrates understanding of sector configurations during a combined status.			
6	Demonstrates the replacement of paper for the printer and knows location of supplies for flight strip printers.			
7	Solicits/Distributes PIREPs to AISR and NIDS.			
8	Forwards appropriate SIGMETs/AIRMETs/CWAs to appropriate positions and WS/SI.			
9	Keeps IDS for JWN and NIDS up to date.			
10	Forwards WX/Configuration/CFRs/EDCTs/GS to JWN Tower			
11	Collects flight progress strips for all positions every hour and marks each bundle with Zulu date and time.			
12	Reports outages to WS/SI			

I certify that all items on this checklist have been completed and/or discussed.

Note: Please return to Training Department when complete.

(Op Initials)	Signature	Date
Trainee:		
OS:		

APPENDIX E-13

West (AD) and EAST (DD) RADAR Handoff OJT Checklist					
Name:			OJT or OS	Trainee	DATE
A.	Phraseology				
	1	Clearance and release off satellite airports			
		a. Releases off tower controlled airport other than per LOA			
		b. Releases off tower controlled airport when automation OTS			
		c. Releases using GCO/landline			
B.	Equipment				
	1	STARS function modes (FSL, ESL, TRNG, FMA, DSA)			
	2	STARS RADAR modes (Fused, ADS-B, Multi, Single Sensor)			
	3	NIDS-navigation, functions, tools			
	4	Electronic Flight Strip Transfer System (EFSTS)			
	5	SWS			
	6	FDIO Equipment			
	7	RVR			
	8	ETVS			
	9	PET 2000			
C.	Airspaces				
	1	Controlled and uncontrolled airspace, MVAs			
	2	Adjacent Airspace (ARTCC, HOP, Class D MQY and JWN)			
	3	Satellite Airports			
	4	Local Point of Interest			
D.	Procedures				
	1	Applicable SOP and LOAs			
	2	Separation Standards (IFR/VFR, Non-RADAR, Visual, ISR)			
	3	Class C airspace			
	4	Opposite Direction Operations (ODO)			
	5	TFR			
	6	Formation flights			
	7	Safety Alerts, MSAW, Traffic Advisories, and Merging Target Procedures			
	8	Primary and Secondary methods of RADAR Identification			
	9	Applying proper speed adjustments			
	10	Holding requirements and phraseology			
	11	Transfer of Communication, Hand-offs, Point-outs (manual/automated)			
	12	PIREP requirements, WX deviations, Hazardous WX (Sigmet, CS, CWA,			
	13	HOP MOA (AD specific)			
	14	Parachute Jumping			
	15	Inter/Intra Facility Coordination			

16	Emergencies (In-flight, HIJACK, Bomb Threat, VFR A/C in IMC)			
17	Visual approach rules and procedures			
18	Use of visual separation			
19	Termination of RADAR services			
20	Missed approach/go-around procedures			
21	HEMS MOCA, ANG and Local Helicopter Operations			
22	Aerial photography			
23	Flight Check requirements and procedures			
I certify that all items on this checklist have been completed and/or discussed.				
NOTE: Return to Training Department when completed.				
(Op Initials)		Signature	Date	
Trainee:				
OS:				

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ICV Checklist for BNA - Nashville Metro (Combined Tower/TRACON)

CVT Year: 2023

Date of most recent ECV: 17-Apr-2023 - 21-Apr-2023

119 of 128 items

id	Item	Description	Reference	Evaluation Area	ICV Rating	ICV Approval	Mitigation Plan?
2	Abbreviated Transmissions	Controllers use standard abbreviated transmissions phraseology	7110.65 par 2-4-9	Operations	Compliant	30-Jan-2023	
359	Air Traffic Control Operational Contingency Plans	Air Traffic Managers are responsible to have Operations Contingency Plans (OCPs) in place to respond to events that affect the Operational Contingency Levels (OCLs) of their facility to provide ATC services. Reference: FAA JO 1900.47 Air Traffic Control Operational Contingency Plans a. Ensure that the OCP conforms to the current version of the FAA JO 1900.47 Chapter 3, Documentation. b. Complete the annual requirements by December 31 of each calendar year. 1. Ensure that all network support agreements have been reviewed 2. Ensure that a facility ATC Zero exercise is conducted unless an actual ATC Zero or ATC	1900.47 Ch 2 Section J; Ch 5 Section C	Operations	Compliant	17-Nov-2022	

		Limited event occurred during the year. 3. Ensure certification of the facility OCP and support procedures in the National OCP Database. 4. Ensure certification of contact information in OCPs in the National OCP Database. c. Ensure the facility has conducted refresher training on the OCP in accordance with FAA JO 3120.4 Air Traffic Technical Training, which includes: 1. Airspace divestment/assumption procedures 2. Use of CPSS information, where applicable 3. Operationally relevant information seen during an exercise or event.					
8	Airport Conditions	Controllers provide timely information regarding landing area conditions using prescribed phraseology	7110.65 ch 3 sec 3; par 4-7-12b and c	Operations	Compliant	20-Jan-2023	
9	Airport Construction	Facility management follow applicable requirements when dealing with airport construction	7210.3 par 10-3-12 and 10-3-13	Operations	Compliant	17-Nov-2022	
10	Airport De-icing Plans	Facility implements local airport de-icing plans	7210.3 par 10-1-12	Operations	Compliant	17-Nov-2022	

11	Altimeter Issued and Requirements	Altimeter issued in accordance with prescribed procedures	7110.65 Ch 2 Sec 7; 7210.3 par 2-10-3 and 2-10-4	Operations	Compliant	17-Nov-2022	
13	Altitude Assignment and Verification	Controllers apply standardized application of procedures, assigning and verifying altitudes and standard phraseology	7110.65 ch 4 sec 5	Operations	Compliant	28-Nov-2022	
14	Altitude Filter Limits	Mode C targets and data blocks are displayed correctly through the use of appropriate altitude limits and display filters	7110.65 par 5-2-24	Operations	Compliant	15-Nov-2022	
15	Anticipating Separation	Takeoff or landing clearances need not be withheld until prescribed separation exists	7110.65 par 3-9-5 and 3-10-6	Operations	Compliant	20-Jan-2023	
16	AOV Credentialing	All requirements for conducting and recording initial credential ratings and biennial skill evaluations and completing return to duty plans are followed	8000.90	Administrative	Compliant	17-Nov-2022	
18	Approach Information and Arrival Procedures - Instructions	Controllers provide radar frequency, beacon changes, and advance approach information	7110.65 par 4-7-1	Operations	Compliant	20-Jan-2023	
19	Approach Separation Minima	Controllers adhere to separation minima for approach procedures	7110.65 par 5-9-5	Operations	Compliant	17-Aug-2023	
20	Arrival and Approach Information and TCP	Controllers provide arrival and approach information and execute TCP	7110.65 par 4-7-10 and 4-7-11	Operations	Compliant	30-Jan-2023	

21	Arrival Procedures	Controllers meet required elements and phraseology requirements	7110.65 ch 3 sec 10; ch 4 sec 7; par 5-9-4 and 5-9-5	Operations	Compliant	01-Mar-2023	
22	Arrival Weather, Airport Conditions	Controllers provide and solicit weather information, airport conditions, and below minima reports as required	7110.65 par 4-7-7; 4-7-11 and 4-7-12a	Operations	Compliant	30-Jan-2023	
25	ATIS Procedures	ATIS duties including content, code broadcast and review	7110.65 ch 2 sec 9	Operations	Compliant	28-Apr-2023	
26	Automated Information Transfer (AIT)	AIT is conducted under the proper conditions	7110.65 par 5-4-8	Operations	Compliant	22-Jun-2023	
28	Battery Transceivers	Back-ups are checked once a week	7210.3 par 3-3-5	Operations	Compliant	17-Aug-2023	
29	Beacon Systems	Controllers use standardized procedures and phraseology related to beacon systems	7110.65 par 5-2-1 through 5-2-16 and 5-2-22	Operations	Compliant	17-Nov-2022	
30	Bird Hazard Procedures/Advisories	Controllers issue bird activity advisories using prescribed phraseology. Required notifications are accomplished.	7110.65 par 2-1-23	Operations	Compliant	15-Nov-2022	
32	Call Sign Usage	Aircraft identification and similar sounding call signs are handled as required	7110.65 par 2-4-15 and 2-4-20	Operations	Compliant	17-Aug-2023	
33	Class B/C/D Airspace Operations	Controllers provide Class B/C/D services and phraseology	7110.65 par 3-1-11; ch 7 sec 7 through 9	Operations	Compliant	22-Nov-2022	

34	Clearances	Controllers use standardized manual and automated clearance formats and phraseology	7110.65 ch 4 sec 2 and 4; par 4-3-4	Operations	Compliant	22-Nov-2022	
40	Coordinate Use of Airspace	Controllers ensure necessary coordination is accomplished	7110.65 par 2-1-14 and 2-1-16	Operations	Compliant	20-Jan-2023	
41	Coordinating Delays	Controllers meet requirements for forwarding delays and coordinating departure clearances	7110.65 par 4-3-7 through 4-3-10	Operations	Compliant	05-Sep-2023	
42	Covered Event Reviews (CER)	CERs are conducted as directed and are completed in accordance with applicable directive	7210.634 par 3-4	Quality Control	Compliant	17-Nov-2022	
44	Data Blocks	Controllers display and retain data blocks as required	7110.65 par 5-3-9a and 5-15-8	Operations	Compliant	15-Nov-2022	
46	Data Entries/Display Data	Use of scratch pad entries, system information, select/inhibit switches	7110.65 par 5-15-5; 7210.3 par 3-9-1	Operations	Compliant	10-Nov-2022	
48	Delay Reporting	Facility reports delays as required	7210.3 par 18-5-12; 7210.55G	Operations	Compliant	24-Jan-2023	Has Plan
49	Delays	Controllers use standard procedures and phraseology associated with departure delays, releases, ground stops, and delay sequencing	7110.65 par 4-3-4 through 4-3-7	Operations	Compliant	20-Jan-2023	

50	Density Altitude Broadcast	Controllers/Specialists broadcast density altitude on the appropriate frequencies, as required	7210.3 par 2-10-6	Operations	Compliant	27-Jan-2023	
51	Departure Procedures	Controllers meet required elements and phraseology requirements	7110.65 ch 3 sec 9; ch 4 sec. 3; ch 5 sec 8	Operations	Compliant	01-Mar-2023	
52	Emergency Frequencies	Facility ensures emergency frequencies are monitored continuously, in working order, and checked regularly	7210.3 par 3-3-3 and 3-3-4	Operations	Compliant	20-Apr-2023	
53	Emergency Procedures	Requirements are met for providing services in/to an emergency in accordance w/ prescribed procedures	7110.65 ch 10 sec 1 and 2	Operations	Exemplary	09-Jan-2023	
59	Flight Check Handling	Controllers use standard flight check handling procedures	7110.65 ch 9 sec 1	Operations	Compliant	27-Jan-2023	
62	GENOT Handling	Ensure that all employees with a need to know are thoroughly briefed prior to performing duties	7210.3 par 2-2-8	Operations	Compliant	09-Jan-2023	
66	Hazardous Weather Broadcast Procedures and Phraseology	Controllers/Specialists use correct procedures and phraseology for HIWAS broadcast	7110.65 par 2-6-6	Operations	Compliant	09-Jan-2023	
65	Helicopter Operations	Controllers apply standard procedures (including locally developed) and phraseology	7110.65 ch 3 sec 11	Operations	Compliant	15-Jun-2023	

67	Inflight Equipment Malfunctions	Controllers properly follow procedures for inflight equipment malfunctions	7110.65 par 2-1-7	Operations	Compliant	17-Nov-2022	
68	Interphone Format	Standard format is used on interphone	7110.65 par 2-4-8 through 2-4-14	Operations	Compliant	17-Aug-2023	
69	Interphone, Frequency Monitoring and Testing	Controllers/Specialists monitor interphones and radio frequencies continuously (to include emergency frequencies when required)	7110.65 par 2-4-2; 7210.3 par 3-3-3 and 3-3-4 (check for emergency frequency testing)	Operations	Compliant	09-Jan-2023	
70	Intersecting Runway Separation	Controllers apply standard separation during intersecting runway operations	7110.65 par 3-9-8 and 3-10-4	Operations	Compliant	01-Mar-2023	
71	Intersection Departures	Intersection departure procedures are applied as required	7110.65 par 3-7-1c; d and e; 7210.3 par 2-1-13	Operations	Compliant	22-Jun-2023	
73	Line Up and Wait (LUAW)	Controllers use proper phraseology and procedures and traffic is exchanged as required	7110.65 par 3-9-4; 3-10-5b and c; 3-10-6b; 7210.3 par 2-6-5c and 10-3-8	Operations	Compliant	22-Nov-2022	
74	Local/Ground Coordination	Controllers ensure coordination is completed and phraseology was correct	7110.65 3-1-3 and 3-1-4; 7210.3BB 3-4-1	Operations	Compliant	22-Nov-2022	

75	Low Level Wind Shear/Microburst Advisories	Using prescribed phraseology, controllers provide wind shear and microburst advisories as reported by equipment and/or pilots	7110.65 par 3-1-8; 7210.3 par 2-10-1a and b	Operations	Compliant	01-Mar-2023	
78	Memory Aids	Facility implements their directive that clearly defines coordination responsibilities and safeguards to prevent inadvertent use of runways	7210.3 par 10-1-7	Operations	Compliant	01-Mar-2023	
79	Merging Target Procedures	Controllers apply merging target procedures as required	7110.65 par 5-1-8	Operations	Compliant	09-Jan-2023	
83	Mode C Validation	Controllers use prescribed phraseology for assigning and verifying altitudes	7110.65 par 5-2-18 through 5-2-22	Operations	Compliant	09-Jan-2023	
84	MSAW/Conflict/MCI Alert	Controllers take appropriate action with E-MSAW, conflict alert, and MCI requirements when a CA or MCI alert is displayed	7110.65 par 5-15-6 and 5-15-7	Operations	Compliant	05-Jun-2023	
85	Multiple Instrument Approach Procedures	Controllers use prescribed procedures and phraseology when providing multiple instrument approach service ? Controllers provided a minimum of 1,000 feet vertical or a minimum of 3 miles radar separation between aircraft during turn on to final approach	7110.65 par 5-9-6 through 5-9-9; 7110.98	Operations	Compliant	17-Aug-2023	

		course ? Controllers provided a minimum of 1.5 miles radar separation diagonally between successive aircraft on adjacent localizer/azimuth courses when runway centerlines were at least 2,500 feet but no more than 4,300 feet apart					
87	National Traffic Management Log (NTML)	Required information is entered into the NTML	7210.3 par 18-5-3 through 18-5-4	Operations	Compliant	01-Jun-2023	
88	NAVAID Monitoring Directive and Application	Monitoring instructions are included in a facility directive and restoration and reporting NAVAID malfunctions are in accordance with local national requirements	7210.3 par 3-5-1	Operations	Compliant	20-Jan-2023	
89	Nonradar Procedures	Controllers apply nonradar procedures as required	7110.65 ch 6; sec 2-1	Operations	Compliant	01-Jun-2023	
90	NORDO/NORAC Aircraft	Proper procedures regarding NORDO/NORAC Aircraft are followed	7110.65 par 10-4-4; 7610.4 ch 7 sec 2 & 3	Operations	Compliant	01-Mar-2023	
93	NOTAM Distribution	Personnel adhere to standardized distribution of received NOTAM information to other ATC facilities	7210.3 par 6-3-2 and para 6-3-4d3; 7930.2 par 3-1-2a; 3-2-1; and 3-2-2	Operations	Compliant	20-Jan-2023	

95	NOTAM Handling	NOTAMs are included on checklists and status information areas and briefed to personnel	7210.3 6-3-4d.3; 7930.2 par 1-3-1a and b; 2-2-3; 3-2-1 and 3-2-2	Operations	Compliant	20-Jan-2023	
106	OJT Selection, Certification and Evaluation	OJTIs are selected certified and evaluated in accordance with National Directive	3120.4; Ch 6	Training	Compliant	22-Nov-2022	
107	Operational Currency	Operational and staff personnel maintain currency as required	7210.3 Ch 2; Section 3	Operations	Compliant	17-Nov-2022	
108	Operational Oversight	FLM/CIC/OS monitors operation, anticipates traffic flow, manages and eliminates distractions, and takes appropriate actions	7210.3 par 2-6-1; 2-6-2; 2-6-5a; 2-6-6; 5-1-2b and 5-3-7e	Operations	Compliant	22-Jun-2023	
373	Operational Reference Material	Information areas, position binders, etc., are current and accurate.	FAAO 7210.3 paragraph 2-1-3 and 2-1-4	Operations	Compliant	17-Nov-2022	
295	Operational Reference Material	7210.3 para 214. REFERENCE FILES		External	Compliant	29-Aug-2023	
109	Operations Plan	Develop, manage and implement a daily strategic plan for air traffic operations in the NAS	7210.3 ch 18 sec 20	Operations	Compliant	27-Jan-2023	
287	Opposite Direction Operations (ODO)	Description: The facility has developed procedures that have been approved by the service area Director Of Operations (through the Operations	7210.3 par. 2-1-34; ATO-SG-15-7 ODO	Operations	Compliant	09-Jan-2023	

		Support Group). The facility has captured those procedures in a local directive. The facility complies with those procedures.					
110	Overdue Aircraft	Controllers gather and share information on overdue aircraft and properly complete applicable control actions	7110.65 par 10-3-1; 10-3-2; 10-3-6 and 10-4-1 through 10-4-3	Operations	Compliant	17-Aug-2023	
116	PIREP Information	Controllers solicit, broadcast, and disseminate PIREPs, as required, using prescribed phraseology	7110.65 par 2-6-2	Operations	Compliant	05-Sep-2023	
117	Point Out Procedures	Controllers use point out procedures and phraseology either manually or via an automated method, as required	7110.65 par 5-4-2c; 5-4-3 and 5-4-7	Operations	Compliant	06-Jun-2023	
118	Position Certification Process	Facilities follow established requirements and procedures for OJT and position certification process	3120.4; Chapter 6	Training	Compliant	17-Aug-2023	
119	Position Determination	Determine position of aircraft prior to issuing instructions or clearance	7110.65 par 3-1-7	Operations	Compliant	24-Jan-2023	
120	Position Relief Briefings	Controllers/Specialists ensure position briefings are completed and recorded, and checklists are used	7110.65 Appendix A; 7210.3 par 2-2-4 and 2-2-6	Operations	Compliant	17-Aug-2023	

121	Position Staffing	Assign personnel to positions as required by activity, equipment, and facility function	7210.3 ch 2 sec 6	Operations	Compliant	27-Jan-2023	
122	Prearranged Coordination	Specialists comply with the prearranged coordination procedures that have been established and published in a facility directive/LOA	7110.65 par 5-3-9b; 5-4-9 and 5-15-4e	Operations	Compliant	22-Nov-2022	
123	Precision Approach Critical Areas/ Precision Obstacle Free Zones	Precision Approach Critical Areas and Precision Obstacle Free Zones are described, depicted, and protected, when required	7110.65 par 3-3-7; 3-7-5 and 3-7-6	Operations	Compliant	10-Nov-2022	
127	Qualification Training	All required employees receive field qualification training IAW National and Local Directives	3120.4 par 4-2 and app D; F; G and H	Training	Compliant	15-Jun-2023	
128	Quality Control Monitoring	Quality Control Operational Skill assessments (QCOSA) are performed in accordance with applicable directive and include identified emphasis items (EI) as required	7210.634 ch 3	Quality Control	Compliant	05-Jun-2023	
129	Quality Control Programs	Quality Control Checks (QCC) and Quality Control Validations (QCV) are completed as required	7210.634 ch 6	Quality Control	Compliant	05-Jun-2023	

131	Radar Handoff Procedures	Controllers use specified radar handoff phraseology and procedures	7110.65 par 2-1-15; 5-4-1 and 5-4-3 through 5-4-6	Operations	Compliant	15-Jun-2023	
132	Radar Identification Methods	Controllers use specified radar identification procedures and phraseology	7110.65 par 5-3-2 through 5-3-7	Operations	Compliant	15-Jun-2023	
133	Radar Termination	Controllers apply standard radar termination procedures and phraseology	7110.65 par 5-1-13	Operations	Compliant	01-Mar-2023	
134	Radar Vectoring	Controllers use standard radar vectoring procedures and phraseology	7110.65 ch 5 sec 6	Operations	Compliant	15-Jun-2023	
135	Radio Communication	Controllers/Specialists use standard radio transmission format and phraseology and apply correct readback/hearback procedures and phraseology	7110.65 par 2-1-17; 2-4-3; 2-4-8 and 2-4-14 through 2-4-22	Operations	Compliant	17-Aug-2023	
136	Refresher Training	Each facility must establish and comply with a written annual refresher training program	3120.4 Ch 4 par 5b and Appendix A	Training	Compliant	06-Jun-2023	
137	Remedial Training	Remedial Training is administered in accordance with National Directive	3120.4 Ch 4 par 6	Training	Not Observed	28-Nov-2022	

138	Runway Exiting	Controllers use prescribed procedures, including those in a local directive, for aircraft exiting runways	7110.65 par 3-10-9	Operations	Compliant	10-Nov-2022	
139	Runway Utilization	Controllers apply standardized procedures and phraseology to arrival and departures using the runways	7110.65 ch 3 sec 5 and 8; par 3-7-1c through e; 7210.3 par 10-1-6	Operations	Compliant	10-Nov-2022	
140	RVR Issuance	Controllers issue runway visual range, when required	7110.65 par 2-8-1 through 2-8-3	Operations	Compliant	20-Jan-2023	
142	Safety Alerts	Controllers apply safety alert requirements and phraseology	7110.65 par 2-1-6	Operations	Compliant	05-Jun-2023	
144	Same Runway Separation	Controllers apply standard separation on same runway operations	7110.65 par 3-9-6 and 3-10-3	Operations	Compliant	01-Aug-2023	
146	Severe Weather	Facility TMUs coordinate directly with the ATCSCC for matters pertaining to severe weather	7210.3 ch 18 sec 14 and 15	Operations	Compliant	22-Jun-2023	
147	Skill Enhancement Training	Skill enhancement training meets required elements of prescribed procedures	3120.4 Ch 4; Section 5d	Training	Compliant	06-Jun-2023	
268	SOP/LOA Reviews	Review LOAs/SOPs for accuracy and completeness of data annually and as needed.	7210.3 paras 2-1-2; 2-1-3; 2-1-4; 2-1-5; 2-1-6; 2-2-14; 3-3-2; 4-3-3;4-3-5; 4-3-6	Operations	Compliant	17-Nov-2022	

148	Special Flight Handling	Standard procedures are followed when handling Special Flights	7110.65	Operations	Compliant	22-Jun-2023	
149	Special Traffic Management Programs (STMP)	Requirements are met when implementing special procedures for events	7210.3 ch 18 sec 14	Operations	Compliant	05-Sep-2023	
150	Special Use Airspace Procedures	Controllers use standard special use airspace procedures: separation standards, clearance in and out, and VFR-on-top	7110.65 ch 9 sec 3	Operations	Not Observed	05-Sep-2023	
151	Special VFR	Controllers use standard procedures and phraseology for Special VFR operations	7110.65 ch 7 sec 5	Operations	Not Observed	27-Jan-2023	
152	Speed Adjustments	Controllers use standard speed control application, methods, minima, and phraseology	7110.65 ch 5 sec 7	Operations	Compliant	17-Aug-2023	
153	Strip Marking	Controllers use standard flight progress strip marking	7110.65 par 2-3-1; 2-3-4 and 2-3-5 through 2-3-10	Operations	Noncompliant - Low	17-Aug-2023	
154	Supplemental Duties	Supplemental duties are performed as required	7210.3 ch 18 sec 4	Operations	Not Observed	06-Jun-2023	
155	Supplemental Training	Training provided prior to effective date of new/revised procedures, regulations or equipment, etc.	3120.4 Ch 4 par 5C and Appendix A	Training	Compliant	22-Jun-2023	
156	System Service Review (SSR)	SSRs are conducted and documented as required and events were documented and closed	7210.634 ch 4	Quality Control	Compliant	06-Jun-2023	

157	Systemic Issue Reviews (SYSIR)	SYSIRs are conducted when issues that have potential system impact have been identified and are completed in accordance with applicable directive	7210.634 par 4-5	Quality Control	Compliant	06-Jun-2023	
158	Taxi/Ground Movement Procedures	Controllers provide clearance instructions using prescribed procedures and phraseology	7110.65 par 3-7-1 through 3-7-4; 7210.3 par 10-3-11; AC 120-57A	Operations	Compliant	22-Jun-2023	
159	TCAS/TAWS	Controllers handle TCAS/TAWS resolution advisories and reporting as required	7110.65 par 2-1-28	Operations	Compliant	05-Jun-2023	
161	Terminal Inter-Facility Coordination	Coordination between TMUs is accomplished as required	7210.3 Ch 18 Section 5	Operations	Compliant	01-Aug-2023	
162	TM Responsibilities of FLM/CIC and ATCS	FLM/CICs and ATCSs work to manage flows of traffic as required	7110.65 par 11-1-2b and c	Operations	Compliant	01-Aug-2023	
163	Tower Radar Displays	Use of tower radar displays	7110.65 par 3-1-9; 7210.3 par 10-5-3	Operations	Compliant	15-Jun-2023	
164	Traffic Advisories	Controllers apply traffic advisories as required	7110.65 par 2-1-21	Operations	Compliant	05-Jun-2023	
166	Traffic Management Initiatives (TMIs)	System capacity and traffic demands are evaluated and initiatives are implemented as necessary	7210.3 par 18-7	Operations	Compliant	27-Jan-2023	
170	Vectoring to Final Approach	Aircraft were vectored to the final approach course to intercept at the applicable point using proper procedures and	7110.65 par 5-9-1 through 5-9-3	Operations	Compliant	15-Jun-2023	

		phraseology					
171	Vehicular Traffic	Controllers use prescribed procedures and phraseology regarding the movement of vehicular traffic	7110.65 par 3-1-3d; 3-1-5; 3-7-6; 3-7-1b	Operations	Compliant	23-Aug-2023	
174	VFR-on-Top	Controllers use standard procedures and phraseology for applying VFR-on-top	7110.65 par 7-3-1; 7-3-2 and 9-3-3	Operations	Not Observed	24-Jul-2023	
175	Visibility Chart Developed/Maintained/Marked	Visibility charts are available (as needed) to meet required elements of prescribed procedures	7210.3 par 2-9-6	Operations	Compliant	06-Jun-2023	
176	Visual Approaches	Controllers use standard procedures and phraseology for applying Visual Approaches	7110.65 ch 7 sec 4	Operations	Compliant	24-Jul-2023	
177	Visual Scanning	Controllers visually scan runways on a continuous basis	7110.65 3-1-12	Operations	Compliant	20-Sep-2023	
178	Visual Separation	Controllers use standard procedures and phraseology for the application of visual separation	7110.65 par 7-2-1a and c	Operations	Compliant	01-Aug-2023	
179	Wake Turbulence	Controllers apply standard separation and advisories for flights impacted by wake turbulence	7110.65 par 2-1-19; 2-1-20 and 5-5-4e; N JO 7110.582	Operations	Compliant	22-Nov-2022	
184	Weather Familiarization	Controllers/Specialists become familiar with pertinent weather information when coming on duty, and stay aware of current weather	7110.65 par 2-6-1	Operations	Compliant	06-Jun-2023	

		information needed to perform ATC duties					
186	Weather Processing	Receipt and dissemination of weather products	7110.65 par 2-9-2b; 7210.3 par 2-9-2; 2-9-4; 2-9-9 and 10-3-1	Operations	Compliant	01-Aug-2023	
187	Weather/Chaff Services	Controllers use correct procedures and phraseology for reporting weather and chaff information to pilots and other affected facilities	7110.65 par 2-6-4	Operations	Compliant	05-Sep-2023	

ICV Checklist for BNA - Nashville Metro (Combined Tower/TRACON)

CVT Year: 2024

Date of most recent ECV: 17-Apr-2023 - 21-Apr-2023

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id	Item	Description	Reference	Evaluation Area	ICV Rating	ICV Approval	Mitigation Plan?
2	Abbreviated Transmissions	Controllers use standard abbreviated transmissions phraseology	7110.65 par 2-4-9	Operations	Compliant	12-Feb-2024	
359	Air Traffic Control Operational Contingency Plans	Air Traffic Managers are responsible to have Operations Contingency Plans (OCPs) in place to respond to events that affect the Operational Contingency Levels (OCLs) of their facility to provide ATC services. Reference: FAA JO 1900.47 Air Traffic Control Operational Contingency Plans a. Ensure that the OCP conforms to the current version of the FAA JO 1900.47 Chapter 3, Documentation. b. Complete the annual requirements by December 31 of each calendar year. 1. Ensure that all network support agreements have been reviewed 2. Ensure that a facility ATC Zero exercise is conducted unless an actual ATC Zero or ATC Limited event occurred during the year. 3. Ensure certification of	1900.47 Ch 2 Section J; Ch 5 Section C	Operations	Compliant	17-Oct-2023	

		the facility OCP and support procedures in the National OCP Database. 4. Ensure certification of contact information in OCPs in the National OCP Database. c. Ensure the facility has conducted refresher training on the OCP in accordance with FAA JO 3120.4 Air Traffic Technical Training, which includes: 1. Airspace divestment/assumption procedures 2. Use of CPSS information, where applicable 3. Operationally relevant information seen during an exercise or event.					
8	Airport Conditions	Controllers provide timely information regarding landing area conditions using prescribed phraseology	7110.65 ch 3 sec 3; par 4-7-12b and c	Operations	Compliant	24-Jan-2024	
9	Airport Construction	Facility management follow applicable requirements when dealing with airport construction	7210.3 par 10-3-12 and 10-3-13	Operations	Compliant	08-Nov-2023	
10	Airport De-icing Plans	Facility implements local airport de-icing plans	7210.3 par 10-1-12	Operations	Compliant	08-Nov-2023	
11	Altimeter Issued and Requirements	Altimeter issued in accordance with prescribed procedures	7110.65 Ch 2 Sec 7; 7210.3 par 2-10-3 and 2-10-4	Operations	Compliant	08-Nov-2023	

13	Altitude Assignment and Verification	Controllers apply standardized application of procedures, assigning and verifying altitudes and standard phraseology	7110.65 ch 4 sec 5	Operations	Compliant	08-Nov-2023	
14	Altitude Filter Limits	Mode C targets and data blocks are displayed correctly through the use of appropriate altitude limits and display filters	7110.65 par 5-2-24	Operations	Compliant	08-Nov-2023	
15	Anticipating Separation	Takeoff or landing clearances need not be withheld until prescribed separation exists	7110.65 par 3-9-5 and 3-10-6	Operations	Compliant	13-May-2024	
16	AOV Credentialing	All requirements for conducting and recording initial credential ratings and biennial skill evaluations and completing return to duty plans are followed	8000.90	Administrative	Compliant	08-Nov-2023	
18	Approach Information and Arrival Procedures - Instructions	Controllers provide radar frequency, beacon changes, and advance approach information	7110.65 par 4-7-1	Operations	Compliant	08-Mar-2024	
19	Approach Separation Minima	Controllers adhere to separation minima for approach procedures	7110.65 par 5-9-5	Operations	Compliant	13-May-2024	
20	Arrival and Approach Information and TCP	Controllers provide arrival and approach information and execute TCP	7110.65 par 4-7-10 and 4-7-11	Operations	Compliant	08-Mar-2024	
21	Arrival Procedures	Controllers meet required elements and phraseology requirements	7110.65 ch 3 sec 10; ch 4 sec 7; par 5-9-4 and 5-9-5	Operations	Compliant	08-Mar-2024	

22	Arrival Weather, Airport Conditions	Controllers provide and solicit weather information, airport conditions, and below minima reports as required	7110.65 par 4-7-7; 4-7-11 and 4-7-12a	Operations	Compliant	24-Jan-2024	
25	ATIS Procedures	ATIS duties including content, code broadcast and review	7110.65 ch 2 sec 9	Operations	Compliant	13-May-2024	
26	Automated Information Transfer (AIT)	AIT is conducted under the proper conditions	7110.65 par 5-4-8	Operations	Compliant	08-Nov-2023	
28	Battery Transceivers	Back-ups are checked once a week	7210.3 par 3-3-5	Operations	Compliant	12-Oct-2023	
29	Beacon Systems	Controllers use standardized procedures and phraseology related to beacon systems	7110.65 par 5-2-1 through 5-2-16 and 5-2-22	Operations	Compliant	08-Nov-2023	
30	Bird Hazard Procedures/Advisories	Controllers issue bird activity advisories using prescribed phraseology. Required notifications are accomplished.	7110.65 par 2-1-23	Operations	Compliant	10-Jan-2024	
32	Call Sign Usage	Aircraft identification and similar sounding call signs are handled as required	7110.65 par 2-4-15 and 2-4-20	Operations	Unrated		
33	Class B/C/D Airspace Operations	Controllers provide Class B/C/D services and phraseology	7110.65 par 3-1-11; ch 7 sec 7 through 9	Operations	Compliant	08-Nov-2023	
34	Clearances	Controllers use standardized manual and automated clearance formats and phraseology	7110.65 ch 4 sec 2 and 4; par 4-3-4	Operations	Compliant	13-May-2024	
40	Coordinate Use of Airspace	Controllers ensure necessary coordination is accomplished	7110.65 par 2-1-14 and 2-1-16	Operations	Unrated		

41	Coordinating Delays	Controllers meet requirements for forwarding delays and coordinating departure clearances	7110.65 par 4-3-7 through 4-3-10	Operations	Unrated		
42	Covered Event Reviews (CER)	CERs are conducted as directed and are completed in accordance with applicable directive	7210.634 par 3-4	Quality Control	Compliant	04-Apr-2024	
44	Data Blocks	Controllers display and retain data blocks as required	7110.65 par 5-3-9a and 5-15-8	Operations	Compliant	08-Nov-2023	
46	Data Entries/Display Data	Use of scratch pad entries, system information, select/inhibit switches	7110.65 par 5-15-5; 7210.3 par 3-9-1	Operations	Compliant	08-Nov-2023	
48	Delay Reporting	Facility reports delays as required	7210.3 par 18-5-12; 7210.55G	Operations	Unrated		Has Plan
49	Delays	Controllers use standard procedures and phraseology associated with departure delays, releases, ground stops, and delay sequencing	7110.65 par 4-3-4 through 4-3-7	Operations	Compliant	13-May-2024	
50	Density Altitude Broadcast	Controllers/Specialists broadcast density altitude on the appropriate frequencies, as required	7210.3 par 2-10-6	Operations	Not Observed	24-Jan-2024	
51	Departure Procedures	Controllers meet required elements and phraseology requirements	7110.65 ch 3 sec 9; ch 4 sec. 3; ch 5 sec 8	Operations	Compliant	12-Feb-2024	
52	Emergency Frequencies	Facility ensures emergency frequencies are monitored continuously, in working order, and checked regularly	7210.3 par 3-3-3 and 3-3-4	Operations	Compliant	13-May-2024	

53	Emergency Procedures	Requirements are met for providing services in/to an emergency in accordance w/ prescribed procedures	7110.65 ch 10 sec 1 and 2	Operations	Compliant	12-Oct-2023	
59	Flight Check Handling	Controllers use standard flight check handling procedures	7110.65 ch 9 sec 1	Operations	Compliant	04-Apr-2024	
62	GENOT Handling	Ensure that all employees with a need to know are thoroughly briefed prior to performing duties	7210.3 par 2-2-8	Operations	Compliant	29-Nov-2023	
66	Hazardous Weather Broadcast Procedures and Phraseology	Controllers/Specialists use correct procedures and phraseology for HIWAS broadcast	7110.65 par 2-6-6	Operations	Compliant	13-May-2024	
65	Helicopter Operations	Controllers apply standard procedures (including locally developed) and phraseology	7110.65 ch 3 sec 11	Operations	Compliant	24-Jan-2024	
67	Inflight Equipment Malfunctions	Controllers properly follow procedures for inflight equipment malfunctions	7110.65 par 2-1-7	Operations	Compliant	12-Oct-2023	
68	Interphone Format	Standard format is used on interphone	7110.65 par 2-4-8 through 2-4-14	Operations	Unrated		
69	Interphone, Frequency Monitoring and Testing	Controllers/Specialists monitor interphones and radio frequencies continuously (to include emergency frequencies when required)	7110.65 par 2-4-2; 7210.3 par 3-3-3 and 3-3-4 (check for emergency frequency testing)	Operations	Compliant	12-Mar-2024	
70	Intersecting Runway Separation	Controllers apply standard separation during intersecting runway operations	7110.65 par 3-9-8 and 3-10-4	Operations	Not Observed	13-May-2024	

71	Intersection Departures	Intersection departure procedures are applied as required	7110.65 par 3-7-1c; d and e; 7210.3 par 2-1-13	Operations	Compliant	13-May-2024	
73	Line Up and Wait (LUAW)	Controllers use proper phraseology and procedures and traffic is exchanged as required	7110.65 par 3-9-4; 3-10-5b and c; 3-10-6b; 7210.3 par 2-6-5c and 10-3-8	Operations	Compliant	08-Mar-2024	
74	Local/Ground Coordination	Controllers ensure coordination is completed and phraseology was correct	7110.65 3-1-3 and 3-1-4; 7210.3BB 3-4-1	Operations	Compliant	08-Mar-2024	
75	Low Level Wind Shear/Microburst Advisories	Using prescribed phraseology, controllers provide wind shear and microburst advisories as reported by equipment and/or pilots	7110.65 par 3-1-8; 7210.3 par 2-10-1a and b	Operations	Compliant	08-Mar-2024	
78	Memory Aids	Facility implements their directive that clearly defines coordination responsibilities and safeguards to prevent inadvertent use of runways	7210.3 par 10-1-7	Operations	Compliant	08-Mar-2024	
79	Merging Target Procedures	Controllers apply merging target procedures as required	7110.65 par 5-1-8	Operations	Compliant	04-Apr-2024	
83	Mode C Validation	Controllers use prescribed phraseology for assigning and verifying altitudes	7110.65 par 5-2-18 through 5-2-22	Operations	Compliant	24-Jan-2024	
84	MSAW/Conflict/MCI Alert	Controllers take appropriate action with E-MSAW, conflict alert, and MCI requirements when a CA or MCI alert is	7110.65 par 5-15-6 and 5-15-7	Operations	Compliant	04-Apr-2024	

		displayed					
85	Multiple Instrument Approach Procedures	Controllers use prescribed procedures and phraseology when providing multiple instrument approach service ? Controllers provided a minimum of 1,000 feet vertical or a minimum of 3 miles radar separation between aircraft during turn on to final approach course ? Controllers provided a minimum of 1.5 miles radar separation diagonally between successive aircraft on adjacent localizer/azimuth courses when runway centerlines were at least 2,500 feet but no more than 4,300 feet apart	7110.65 par 5-9-6 through 5-9-9; 7110.98	Operations	Compliant	12-Feb-2024	
87	National Traffic Management Log (NTML)	Required information is entered into the NTML	7210.3 par 18-5-3 through 18-5-4	Operations	Unrated		
88	NAVAID Monitoring Directive and Application	Monitoring instructions are included in a facility directive and restoration and reporting NAVAID malfunctions are in accordance with local national requirements	7210.3 par 3-5-1	Operations	Compliant	29-Nov-2023	
89	Nonradar Procedures	Controllers apply nonradar procedures as required	7110.65 ch 6; sec 2-1	Operations	Compliant	04-Apr-2024	

90	NORDO/NORAC Aircraft	Proper procedures regarding NORDO/NORAC Aircraft are followed	7110.65 par 10-4-4; 7610.4 ch 7 sec 2 & 3	Operations	Compliant	12-Oct-2023	
93	NOTAM Distribution	Personnel adhere to standardized distribution of received NOTAM information to other ATC facilities	7210.3 par 6-3-2 and para 6-3-4d3; 7930.2 par 3-1-2a; 3-2-1; and 3-2-2	Operations	Compliant	29-Nov-2023	
95	NOTAM Handling	NOTAMs are included on checklists and status information areas and briefed to personnel	7210.3 6-3-4d.3; 7930.2 par 1-3-1a and b; 2-2-3; 3-2-1 and 3-2-2	Operations	Compliant	29-Nov-2023	
106	OJTI Selection, Certification and Evaluation	OJTIs are selected certified and evaluated in accordance with National Directive	3120.4; Ch 6	Training	Compliant	08-Nov-2023	
107	Operational Currency	Operational and staff personnel maintain currency as required	7210.3 Ch 2; Section 3	Operations	Compliant	04-Apr-2024	
108	Operational Oversight	FLM/CIC/OS monitors operation, anticipates traffic flow, manages and eliminates distractions, and takes appropriate actions	7210.3 par 2-6-1; 2-6-2; 2-6-5a; 2-6-6; 5-1-2b and 5-3-7e	Operations	Unrated		
373	Operational Reference Material	Information areas, position binders, etc., are current and accurate.	FAAO 7210.3 paragraph 2-1-3 and 2-1-4	Operations	Compliant	08-Nov-2023	
109	Operations Plan	Develop, manage and implement a daily strategic plan for air traffic operations in the NAS	7210.3 ch 18 sec 20	Operations	Unrated		

287	Opposite Direction Operations (ODO)	Description: The facility has developed procedures that have been approved by the service area Director Of Operations (through the Operations Support Group). The facility has captured those procedures in a local directive. The facility complies with those procedures.	7210.3 par. 2-1-34; ATO-SG-15-7 ODO	Operations	Compliant	12-Oct-2023	
110	Overdue Aircraft	Controllers gather and share information on overdue aircraft and properly complete applicable control actions	7110.65 par 10-3-1; 10-3-2; 10-3-6 and 10-4-1 through 10-4-3	Operations	Unrated		
116	PIREP Information	Controllers solicit, broadcast, and disseminate PIREPs, as required, using prescribed phraseology	7110.65 par 2-6-2	Operations	Unrated		
117	Point Out Procedures	Controllers use point out procedures and phraseology either manually or via an automated method, as required	7110.65 par 5-4-2c; 5-4-3 and 5-4-7	Operations	Compliant	12-Feb-2024	
118	Position Certification Process	Facilities follow established requirements and procedures for OJT and position certification process	3120.4; Chapter 6	Training	Compliant	08-Nov-2023	
119	Position Determination	Determine position of aircraft prior to issuing instructions or clearance	7110.65 par 3-1-7	Operations	Compliant	24-Jan-2024	

120	Position Relief Briefings	Controllers/Specialists ensure position briefings are completed and recorded, and checklists are used	7110.65 Appendix A; 7210.3 par 2-2-4 and 2-2-6	Operations	Unrated		
121	Position Staffing	Assign personnel to positions as required by activity, equipment, and facility function	7210.3 ch 2 sec 6	Operations	Compliant	13-May-2024	
122	P rearranged Coordination	Specialists comply with the prearranged coordination procedures that have been established and published in a facility directive/LOA	7110.65 par 5-3-9b; 5-4-9 and 5-15-4e	Operations	Unrated		
123	Precision Approach Critical Areas/ Precision Obstacle Free Zones	Precision Approach Critical Areas and Precision Obstacle Free Zones are described, depicted, and protected, when required	7110.65 par 3-3-7; 3-7-5 and 3-7-6	Operations	Compliant	13-May-2024	
127	Qualification Training	All required employees receive field qualification training IAW National and Local Directives	3120.4 par 4-2 and app D; F; G and H	Training	Unrated		
128	Quality Control Monitoring	Quality Control Operational Skill assessments (QCOSA) are performed in accordance with applicable directive and include identified emphasis items (EI) as required	7210.634 ch 3	Quality Control	Compliant	12-Oct-2023	
129	Quality Control Programs	Quality Control Checks (QCC) and Quality Control Validations (QCV) are completed as required	7210.634 ch 6	Quality Control	Compliant	24-Jan-2024	

131	Radar Handoff Procedures	Controllers use specified radar handoff phraseology and procedures	7110.65 par 2-1-15; 5-4-1 and 5-4-3 through 5-4-6	Operations	Compliant	12-Feb-2024	
132	Radar Identification Methods	Controllers use specified radar identification procedures and phraseology	7110.65 par 5-3-2 through 5-3-7	Operations	Compliant	12-Feb-2024	
133	Radar Termination	Controllers apply standard radar termination procedures and phraseology	7110.65 par 5-1-13	Operations	Compliant	12-Feb-2024	
134	Radar Vectoring	Controllers use standard radar vectoring procedures and phraseology	7110.65 ch 5 sec 6	Operations	Compliant	12-Feb-2024	
135	Radio Communication	Controllers/Specialists use standard radio transmission format and phraseology and apply correct readback/hearback procedures and phraseology	7110.65 par 2-1-17; 2-4-3; 2-4-8 and 2-4-14 through 2-4-22	Operations	Unrated		
136	Refresher Training	Each facility must establish and comply with a written annual refresher training program	3120.4 Ch 4 par 5b and Appendix A	Training	Compliant	04-Apr-2024	
137	Remedial Training	Remedial Training is administered in accordance with National Directive	3120.4 Ch 4 par 6	Training	Not Observed	08-Nov-2023	
138	Runway Exiting	Controllers use prescribed procedures, including those in a local directive, for aircraft exiting runways	7110.65 par 3-10-9	Operations	Compliant	12-Feb-2024	

139	Runway Utilization	Controllers apply standardized procedures and phraseology to arrival and departures using the runways	7110.65 ch 3 sec 5 and 8; par 3-7-1c through e; 7210.3 par 10-1-6	Operations	Compliant	08-Mar-2024	
140	RVR Issuance	Controllers issue runway visual range, when required	7110.65 par 2-8-1 through 2-8-3	Operations	Compliant	04-Apr-2024	
142	Safety Alerts	Controllers apply safety alert requirements and phraseology	7110.65 par 2-1-6	Operations	Compliant	04-Apr-2024	
144	Same Runway Separation	Controllers apply standard separation on same runway operations	7110.65 par 3-9-6 and 3-10-3	Operations	Compliant	13-May-2024	
146	Severe Weather	Facility TMUs coordinate directly with the ATCSCC for matters pertaining to severe weather	7210.3 ch 18 sec 14 and 15	Operations	Unrated		
147	Skill Enhancement Training	Skill enhancement training meets required elements of prescribed procedures	3120.4 Ch 4; Section 5d	Training	Unrated		
268	SOP/LOA Reviews	Review LOAs/SOPs for accuracy and completeness of data annually and as needed.	7210.3 paras 2-1-2; 2-1-3; 2-1-4; 2-1-5; 2-1-6; 2-2-14; 3-3-2; 4-3-3; 4-3-5; 4-3-6	Operations	Compliant	29-Nov-2023	
148	Special Flight Handling	Standard procedures are followed when handling Special Flights	7110.65	Operations	Compliant	04-Apr-2024	
149	Special Traffic Management Programs (STMP)	Requirements are met when implementing special procedures for events	7210.3 ch 18 sec 14	Operations	Unrated		

150	Special Use Airspace Procedures	Controllers use standard special use airspace procedures: separation standards, clearance in and out, and VFR-on-top	7110.65 ch 9 sec 3	Operations	Compliant	04-Apr-2024	
151	Special VFR	Controllers use standard procedures and phraseology for Special VFR operations	7110.65 ch 7 sec 5	Operations	Unrated		
152	Speed Adjustments	Controllers use standard speed control application, methods, minima, and phraseology	7110.65 ch 5 sec 7	Operations	Compliant	04-Apr-2024	
153	Strip Marking	Controllers use standard flight progress strip marking	7110.65 par 2-3-1; 2-3-4 and 2-3-5 through 2-3-10	Operations	Compliant	06-Dec-2023	
154	Supplemental Duties	Supplemental duties are performed as required	7210.3 ch 18 sec 4	Operations	Unrated		
155	Supplemental Training	Training provided prior to effective date of new/revised procedures, regulations or equipment, etc.	3120.4 Ch 4 par 5C and Appendix A	Training	Unrated		
156	System Service Review (SSR)	SSRs are conducted and documented as required and events were documented and closed	7210.634 ch 4	Quality Control	Compliant	29-Nov-2023	
157	Systemic Issue Reviews (SYSIR)	SYSIRs are conducted when issues that have potential system impact have been identified and are completed in accordance with applicable directive	7210.634 par 4-5	Quality Control	Compliant	29-Nov-2023	

158	Taxi/Ground Movement Procedures	Controllers provide clearance instructions using prescribed procedures and phraseology	7110.65 par 3-7-1 through 3-7-4; 7210.3 par 10-3-11; AC 120-57A	Operations	Unrated		
159	TCAS/TAWS	Controllers handle TCAS/TAWS resolution advisories and reporting as required	7110.65 par 2-1-28	Operations	Compliant	24-Jan-2024	
161	Terminal Inter-Facility Coordination	Coordination between TMUs is accomplished as required	7210.3 Ch 18 Section 5	Operations	Unrated		
162	TM Responsibilities of FLM/CIC and ATCS	FLM/CICs and ATCSs work to manage flows of traffic as required	7110.65 par 11-1-2b and c	Operations	Unrated		
163	Tower Radar Displays	Use of tower radar displays	7110.65 par 3-1-9; 7210.3 par 10-5-3	Operations	Unrated		
164	Traffic Advisories	Controllers apply traffic advisories as required	7110.65 par 2-1-21	Operations	Compliant	12-Oct-2023	
166	Traffic Management Initiatives (TMIs)	System capacity and traffic demands are evaluated and initiatives are implemented as necessary	7210.3 par 18-7	Operations	Unrated		
170	Vectoring to Final Approach	Aircraft were vectored to the final approach course to intercept at the applicable point using proper procedures and phraseology	7110.65 par 5-9-1 through 5-9-3	Operations	Compliant	13-May-2024	
171	Vehicular Traffic	Controllers use prescribed procedures and phraseology regarding the movement of vehicular traffic	7110.65 par 3-1-3d; 3-1-5; 3-7-6; 3-7-1b	Operations	Unrated		

174	VFR-on-Top	Controllers use standard procedures and phraseology for applying VFR-on-top	7110.65 par 7-3-1; 7-3-2 and 9-3-3	Operations	Compliant	13-May-2024	
175	Visibility Chart Developed/Maintained/Marked	Visibility charts are available (as needed) to meet required elements of prescribed procedures	7210.3 par 2-9-6	Operations	Compliant	13-May-2024	
176	Visual Approaches	Controllers use standard procedures and phraseology for applying Visual Approaches	7110.65 ch 7 sec 4	Operations	Compliant	13-May-2024	
177	Visual Scanning	Controllers visually scan runways on a continuous basis	7110.65 3-1-12	Operations	Compliant	13-May-2024	
178	Visual Separation	Controllers use standard procedures and phraseology for the application of visual separation	7110.65 par 7-2-1a and c	Operations	Unrated		
179	Wake Turbulence	Controllers apply standard separation and advisories for flights impacted by wake turbulence	7110.65 par 2-1-19; 2-1-20 and 5-5-4e; N JO 7110.582	Operations	Compliant	04-Apr-2024	
184	Weather Familiarization	Controllers/Specialists become familiar with pertinent weather information when coming on duty, and stay aware of current weather information needed to perform ATC duties	7110.65 par 2-6-1	Operations	Unrated		
186	Weather Processing	Receipt and dissemination of weather products	7110.65 par 2-9-2b; 7210.3 par 2-9-2; 2-9-4; 2-9-9 and 10-3-1	Operations	Unrated		

187	Weather/Chaff Services	Controllers use correct procedures and phraseology for reporting weather and chaff information to pilots and other affected facilities	7110.65 par 2-6-4	Operations	Compliant	04-Apr-2024	
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ECV Checklist for BNA - Nashville Metro (Combined Tower/TRACON)

Scheduled Dates: 17-Apr-2023 - 21-Apr-2023

ECV Complete Date: 24-Apr-2023

CVT Year: 2023

Primary Evaluator: Shawn R Roberts

Secondary Evaluator: Robert Jolley

115 of 115 items

id	Item	Description	Reference	Evaluation Area	ECV Rating	ECV Approval	Mitigation Plan?
1	Abbreviated Departure Clearances	Controllers use approved abbreviated departure clearances and phraseology	7110.65 par 4-3-3	Operations	Compliant	24-Apr-2023	
2	Abbreviated Transmissions	Controllers use standard abbreviated transmissions phraseology	7110.65 par 2-4-9	Operations	Compliant	24-Apr-2023	
359	Air Traffic Control Operational Contingency Plans	Air Traffic Managers are responsible to have Operations Contingency Plans (OCPs) in place to respond to events that affect the Operational Contingency Levels (OCLs) of their facility to provide ATC services. Reference: FAA JO 1900.47 Air Traffic Control Operational Contingency Plans a. Ensure that the OCP conforms to the current version of the FAA JO 1900.47 Chapter 3, Documentation. b. Complete the annual requirements by December 31 of each calendar year. 1. Ensure that all network support	1900.47 Ch 2 Section J; Ch 5 Section C	Operations	Compliant	24-Apr-2023	

		agreements have been reviewed 2. Ensure that a facility ATC Zero exercise is conducted unless an actual ATC Zero or ATC Limited event occurred during the year. 3. Ensure certification of the facility OCP and support procedures in the National OCP Database. 4. Ensure certification of contact information in OCPs in the National OCP Database. c. Ensure the facility has conducted refresher training on the OCP in accordance with FAA JO 3120.4 Air Traffic Technical Training, which includes: 1. Airspace divestment/assumption procedures 2. Use of CPSS information, where applicable 3. Operationally relevant information seen during an exercise or event.					
8	Airport Conditions	Controllers provide timely information regarding landing area conditions using prescribed phraseology	7110.65 ch 3 sec 3; par 4-7-12b and c	Operations	Compliant	24-Apr-2023	

9	Airport Construction	Facility management follow applicable requirements when dealing with airport construction	7210.3 par 10-3-12 and 10-3-13	Operations	Compliant	24-Apr-2023	
10	Airport De-icing Plans	Facility implements local airport de-icing plans	7210.3 par 10-1-12	Operations	Compliant	24-Apr-2023	
11	Altimeter Issued and Requirements	Altimeter issued in accordance with prescribed procedures	7110.65 Ch 2 Sec 7; 7210.3 par 2-10-3 and 2-10-4	Operations	Compliant	24-Apr-2023	
13	Altitude Assignment and Verification	Controllers apply standardized application of procedures, assigning and verifying altitudes and standard phraseology	7110.65 ch 4 sec 5	Operations	Compliant	24-Apr-2023	
14	Altitude Filter Limits	Mode C targets and data blocks are displayed correctly through the use of appropriate altitude limits and display filters	7110.65 par 5-2-24	Operations	Compliant	24-Apr-2023	
15	Anticipating Separation	Takeoff or landing clearances need not be withheld until prescribed separation exists	7110.65 par 3-9-5 and 3-10-6	Operations	Compliant	24-Apr-2023	
16	AOV Credentialing	All requirements for conducting and recording initial credential ratings and biennial skill evaluations and completing return to duty plans are followed	8000.90	Administrative	Compliant	24-Apr-2023	

17	Approach Clearance Procedures and Phraseology	Controllers issue approach clearances, adhere to separation minima, and issue alternate missed approach instructions using prescribed phraseology	7110.65 ch 4 sec 8; ch 7 sec 4; par 4-7-6 and 4-7-10	Operations	Compliant	24-Apr-2023	
18	Approach Information and Arrival Procedures - Instructions	Controllers provide radar frequency, beacon changes, and advance approach information	7110.65 par 4-7-1	Operations	Compliant	24-Apr-2023	
19	Approach Separation Minima	Controllers adhere to separation minima for approach procedures	7110.65 par 5-9-5	Operations	Compliant	24-Apr-2023	
20	Arrival and Approach Information and TCP	Controllers provide arrival and approach information and execute TCP	7110.65 par 4-7-10 and 4-7-11	Operations	Compliant	24-Apr-2023	
21	Arrival Procedures	Controllers meet required elements and phraseology requirements	7110.65 ch 3 sec 10; ch 4 sec 7; par 5-9-4 and 5-9-5	Operations	Compliant	24-Apr-2023	
22	Arrival Weather, Airport Conditions	Controllers provide and solicit weather information, airport conditions, and below minima reports as required	7110.65 par 4-7-7; 4-7-11 and 4-7-12a	Operations	Compliant	24-Apr-2023	
25	ATIS Procedures	ATIS duties including content, code broadcast and review	7110.65 ch 2 sec 9	Operations	Informational	24-Apr-2023	
26	Automated Information Transfer (AIT)	AIT is conducted under the proper conditions	7110.65 par 5-4-8	Operations	Compliant	24-Apr-2023	

28	Battery Transceivers	Back-ups are checked once a week	7210.3 par 3-3-5	Operations	Compliant	24-Apr-2023	
29	Beacon Systems	Controllers use standardized procedures and phraseology related to beacon systems	7110.65 par 5-2-1 through 5-2-16 and 5-2-22	Operations	Compliant	24-Apr-2023	
30	Bird Hazard Procedures/Advisories	Controllers issue bird activity advisories using prescribed phraseology. Required notifications are accomplished.	7110.65 par 2-1-23	Operations	Noncompliant - Low	24-Apr-2023	
32	Call Sign Usage	Aircraft identification and similar sounding call signs are handled as required	7110.65 par 2-4-15 and 2-4-20	Operations	Informational	24-Apr-2023	
33	Class B/C/D Airspace Operations	Controllers provide Class B/C/D services and phraseology	7110.65 par 3-1-11; ch 7 sec 7 through 9	Operations	Compliant	24-Apr-2023	
34	Clearances	Controllers use standardized manual and automated clearance formats and phraseology	7110.65 ch 4 sec 2 and 4; par 4-3-4	Operations	Compliant	24-Apr-2023	
40	Coordinate Use of Airspace	Controllers ensure necessary coordination is accomplished	7110.65 par 2-1-14 and 2-1-16	Operations	Compliant	24-Apr-2023	
41	Coordinating Delays	Controllers meet requirements for forwarding delays and coordinating departure clearances	7110.65 par 4-3-7 through 4-3-10	Operations	Compliant	24-Apr-2023	
42	Covered Event Reviews (CER)	CERs are conducted as directed and are completed in accordance with applicable directive	7210.634 par 3-4	Quality Control	Compliant	24-Apr-2023	

43	CTO Certification	Facility has a designated CTO examiner. Certificates are issued. CTO certificates are readily available	8000.90	Administrative	Compliant	24-Apr-2023	
44	Data Blocks	Controllers display and retain data blocks as required	7110.65 par 5-3-9a and 5-15-8	Operations	Compliant	24-Apr-2023	
46	Data Entries/Display Data	Use of scratch pad entries, system information, select/inhibit switches	7110.65 par 5-15-5; 7210.3 par 3-9-1	Operations	Compliant	24-Apr-2023	
48	Delay Reporting	Facility reports delays as required	7210.3 par 18-5-12; 7210.55G	Operations	Noncompliant - Low	24-Apr-2023	Has Plan
49	Delays	Controllers use standard procedures and phraseology associated with departure delays, releases, ground stops, and delay sequencing	7110.65 par 4-3-4 through 4-3-7	Operations	Compliant	24-Apr-2023	
51	Departure Procedures	Controllers meet required elements and phraseology requirements	7110.65 ch 3 sec 9; ch 4 sec. 3; ch 5 sec 8	Operations	Compliant	24-Apr-2023	
52	Emergency Frequencies	Facility ensures emergency frequencies are monitored continuously, in working order, and checked regularly	7210.3 par 3-3-3 and 3-3-4	Operations	Compliant	24-Apr-2023	
53	Emergency Procedures	Requirements are met for providing services in/to an emergency in accordance w/ prescribed procedures	7110.65 ch 10 sec 1 and 2	Operations	Compliant	24-Apr-2023	

59	Flight Check Handling	Controllers use standard flight check handling procedures	7110.65 ch 9 sec 1	Operations	Compliant	24-Apr-2023	
62	GENOT Handling	Ensure that all employees with a need to know are thoroughly briefed prior to performing duties	7210.3 par 2-2-8	Operations	Compliant	24-Apr-2023	
66	Hazardous Weather Broadcast Procedures and Phraseology	Controllers/Specialists use correct procedures and phraseology for HIWAS broadcast	7110.65 par 2-6-6	Operations	Compliant	24-Apr-2023	
65	Helicopter Operations	Controllers apply standard procedures (including locally developed) and phraseology	7110.65 ch 3 sec 11	Operations	Compliant	24-Apr-2023	
67	Inflight Equipment Malfunctions	Controllers properly follow procedures for inflight equipment malfunctions	7110.65 par 2-1-7	Operations	Compliant	24-Apr-2023	
68	Interphone Format	Standard format is used on interphone	7110.65 par 2-4-8 through 2-4-14	Operations	Informational	24-Apr-2023	
69	Interphone, Frequency Monitoring and Testing	Controllers/Specialists monitor interphones and radio frequencies continuously (to include emergency frequencies when required)	7110.65 par 2-4-2; 7210.3 par 3-3-3 and 3-3-4 (check for emergency frequency testing)	Operations	Compliant	24-Apr-2023	
70	Intersecting Runway Separation	Controllers apply standard separation during intersecting runway operations	7110.65 par 3-9-8 and 3-10-4	Operations	Not Observed	24-Apr-2023	

71	Intersection Departures	Intersection departure procedures are applied as required	7110.65 par 3-7-1c; d and e; 7210.3 par 2-1-13	Operations	Compliant	24-Apr-2023	
73	Line Up and Wait (LUAW)	Controllers use proper phraseology and procedures and traffic is exchanged as required	7110.65 par 3-9-4; 3-10-5b and c; 3-10-6b; 7210.3 par 2-6-5c and 10-3-8	Operations	Compliant	24-Apr-2023	
74	Local/Ground Coordination	Controllers ensure coordination is completed and phraseology was correct	7110.65 3-1-3 and 3-1-4; 7210.3BB 3-4-1	Operations	Compliant	24-Apr-2023	
75	Low Level Wind Shear/Microburst Advisories	Using prescribed phraseology, controllers provide wind shear and microburst advisories as reported by equipment and/or pilots	7110.65 par 3-1-8; 7210.3 par 2-10-1a and b	Operations	Compliant	24-Apr-2023	
78	Memory Aids	Facility implements their directive that clearly defines coordination responsibilities and safeguards to prevent inadvertent use of runways	7210.3 par 10-1-7	Operations	Compliant	24-Apr-2023	
79	Merging Target Procedures	Controllers apply merging target procedures as required	7110.65 par 5-1-8	Operations	Compliant	24-Apr-2023	
83	Mode C Validation	Controllers use prescribed phraseology for assigning and verifying altitudes	7110.65 par 5-2-18 through 5-2-22	Operations	Compliant	24-Apr-2023	

84	MSAW/Conflict/MCI Alert	Controllers take appropriate action with E-MSAW, conflict alert, and MCI requirements when a CA or MCI alert is displayed	7110.65 par 5-15-6 and 5-15-7	Operations	Compliant	24-Apr-2023	
85	Multiple Instrument Approach Procedures	Controllers use prescribed procedures and phraseology when providing multiple instrument approach service ? Controllers provided a minimum of 1,000 feet vertical or a minimum of 3 miles radar separation between aircraft during turn on to final approach course ? Controllers provided a minimum of 1.5 miles radar separation diagonally between successive aircraft on adjacent localizer/azimuth courses when runway centerlines were at least 2,500 feet but no more than 4,300 feet apart	7110.65 par 5-9-6 through 5-9-9; 7110.98	Operations	Not Observed	24-Apr-2023	
87	National Traffic Management Log (NTML)	Required information is entered into the NTML	7210.3 par 18-5-3 through 18-5-4	Operations	Noncompliant - Low	24-Apr-2023	
88	NAVAID Monitoring Directive and Application	Monitoring instructions are included in a facility directive and restoration and reporting NAVAID malfunctions are in accordance with local	7210.3 par 3-5-1	Operations	Compliant	24-Apr-2023	

		national requirements					
89	Nonradar Procedures	Controllers apply nonradar procedures as required	7110.65 ch 6; sec 2-1	Operations	Compliant	24-Apr-2023	
90	NORDO/NORAC Aircraft	Proper procedures regarding NORDO/NORAC Aircraft are followed	7110.65 par 10-4-4; 7610.4 ch 7 sec 2 & 3	Operations	Compliant	24-Apr-2023	
95	NOTAM Handling	NOTAMs are included on checklists and status information areas and briefed to personnel	7210.3 6-3-4d.3; 7930.2 par 1-3-1a and b; 2-2-3; 3-2-1 and 3-2-2	Operations	Compliant	24-Apr-2023	
106	OJT Selection, Certification and Evaluation	OJTIs are selected certified and evaluated in accordance with National Directive	3120.4; Ch 6	Training	Compliant	24-Apr-2023	
107	Operational Currency	Operational and staff personnel maintain currency as required	7210.3 Ch 2; Section 3	Operations	Compliant	24-Apr-2023	
108	Operational Oversight	FLM/CIC/OS monitors operation, anticipates traffic flow, manages and eliminates distractions, and takes appropriate actions	7210.3 par 2-6-1; 2-6-2; 2-6-5a; 2-6-6; 5-1-2b and 5-3-7e	Operations	Informational	24-Apr-2023	
295	Operational Reference Material	7210.3 para 214. REFERENCE FILES		External	Noncompliant - Low	24-Apr-2023	
287	Opposite Direction Operations (ODO)	Description: The facility has developed procedures that have been approved by the service area Director Of Operations (through the Operations Support Group).	7210.3 par. 2-1-34; ATO-SG-15-7 ODO	Operations	Compliant	24-Apr-2023	

		The facility has captured those procedures in a local directive. The facility complies with those procedures.					
110	Overdue Aircraft	Controllers gather and share information on overdue aircraft and properly complete applicable control actions	7110.65 par 10-3-1; 10-3-2; 10-3-6 and 10-4-1 through 10-4-3	Operations	Not Observed	24-Apr-2023	
116	PIREP Information	Controllers solicit, broadcast, and disseminate PIREPs, as required, using prescribed phraseology	7110.65 par 2-6-2	Operations	Compliant	24-Apr-2023	
117	Point Out Procedures	Controllers use point out procedures and phraseology either manually or via an automated method, as required	7110.65 par 5-4-2c; 5-4-3 and 5-4-7	Operations	Informational	24-Apr-2023	
118	Position Certification Process	Facilities follow established requirements and procedures for OJT and position certification process	3120.4; Chapter 6	Training	Noncompliant - Medium	24-Apr-2023	
119	Position Determination	Determine position of aircraft prior to issuing instructions or clearance	7110.65 par 3-1-7	Operations	Compliant	24-Apr-2023	
120	Position Relief Briefings	Controllers/Specialists ensure position briefings are completed and recorded, and checklists are used	7110.65 Appendix A; 7210.3 par 2-2-4 and 2-2-6	Operations	Noncompliant - Low	24-Apr-2023	

121	Position Staffing	Assign personnel to positions as required by activity, equipment, and facility function	7210.3 ch 2 sec 6	Operations	Compliant	24-Apr-2023	
122	Prearranged Coordination	Specialists comply with the prearranged coordination procedures that have been established and published in a facility directive/LOA	7110.65 par 5-3-9b; 5-4-9 and 5-15-4e	Operations	Compliant	24-Apr-2023	
123	Precision Approach Critical Areas/ Precision Obstacle Free Zones	Precision Approach Critical Areas and Precision Obstacle Free Zones are described, depicted, and protected, when required	7110.65 par 3-3-7; 3-7-5 and 3-7-6	Operations	Compliant	24-Apr-2023	
125	Preparation of FAA Form 7230-4	Manual or automated form has all required elements		Operations	Compliant	24-Apr-2023	
127	Qualification Training	All required employees receive field qualification training IAW National and Local Directives	3120.4 par 4-2 and app D; F; G and H	Training	Compliant	24-Apr-2023	
128	Quality Control Monitoring	Quality Control Operational Skill assessments (QCOSA) are performed in accordance with applicable directive and include identified emphasis items (EI) as required	7210.634 ch 3	Quality Control	Compliant	24-Apr-2023	
129	Quality Control Programs	Quality Control Checks (QCC) and Quality Control Validations (QCV) are completed as required	7210.634 ch 6	Quality Control	Compliant	24-Apr-2023	

131	Radar Handoff Procedures	Controllers use specified radar handoff phraseology and procedures	7110.65 par 2-1-15; 5-4-1 and 5-4-3 through 5-4-6	Operations	Compliant	24-Apr-2023	
132	Radar Identification Methods	Controllers use specified radar identification procedures and phraseology	7110.65 par 5-3-2 through 5-3-7	Operations	Compliant	24-Apr-2023	
133	Radar Termination	Controllers apply standard radar termination procedures and phraseology	7110.65 par 5-1-13	Operations	Compliant	24-Apr-2023	
134	Radar Vectoring	Controllers use standard radar vectoring procedures and phraseology	7110.65 ch 5 sec 6	Operations	Compliant	24-Apr-2023	
135	Radio Communication	Controllers/Specialists use standard radio transmission format and phraseology and apply correct readback/hearback procedures and phraseology	7110.65 par 2-1-17; 2-4-3; 2-4-8 and 2-4-14 through 2-4-22	Operations	Noncompliant - Medium	24-Apr-2023	
136	Refresher Training	Each facility must establish and comply with a written annual refresher training program	3120.4 Ch 4 par 5b and Appendix A	Training	Noncompliant - Medium	24-Apr-2023	
137	Remedial Training	Remedial Training is administered in accordance with National Directive	3120.4 Ch 4 par 6	Training	Not Observed	24-Apr-2023	

138	Runway Exiting	Controllers use prescribed procedures, including those in a local directive, for aircraft exiting runways	7110.65 par 3-10-9	Operations	Compliant	24-Apr-2023	
139	Runway Utilization	Controllers apply standardized procedures and phraseology to arrival and departures using the runways	7110.65 ch 3 sec 5 and 8; par 3-7-1c through e; 7210.3 par 10-1-6	Operations	Compliant	24-Apr-2023	
140	RVR Issuance	Controllers issue runway visual range, when required	7110.65 par 2-8-1 through 2-8-3	Operations	Not Observed	24-Apr-2023	
142	Safety Alerts	Controllers apply safety alert requirements and phraseology	7110.65 par 2-1-6	Operations	Compliant	24-Apr-2023	
144	Same Runway Separation	Controllers apply standard separation on same runway operations	7110.65 par 3-9-6 and 3-10-3	Operations	Compliant	24-Apr-2023	
147	Skill Enhancement Training	Skill enhancement training meets required elements of prescribed procedures	3120.4 Ch 4; Section 5d	Training	Noncompliant - Low	24-Apr-2023	
268	SOP/LOA Reviews	Review LOAs/SOPs for accuracy and completeness of data annually and as needed.	7210.3 paras 2-1-2; 2-1-3; 2-1-4; 2-1-5; 2-1-6; 2-2-14; 3-3-2; 4-3-3; 4-3-5; 4-3-6	Operations	Compliant	24-Apr-2023	
148	Special Flight Handling	Standard procedures are followed when handling Special Flights	7110.65	Operations	Compliant	24-Apr-2023	

151	Special VFR	Controllers use standard procedures and phraseology for Special VFR operations	7110.65 ch 7 sec 5	Operations	Not Observed	24-Apr-2023	
152	Speed Adjustments	Controllers use standard speed control application, methods, minima, and phraseology	7110.65 ch 5 sec 7	Operations	Compliant	24-Apr-2023	
153	Strip Marking	Controllers use standard flight progress strip marking	7110.65 par 2-3-1; 2-3-4 and 2-3-5 through 2-3-10	Operations	Noncompliant - Low	24-Apr-2023	
155	Supplemental Training	Training provided prior to effective date of new/revised procedures, regulations or equipment, etc.	3120.4 Ch 4 par 5C and Appendix A	Training	Compliant	24-Apr-2023	
156	System Service Review (SSR)	SSRs are conducted and documented as required and events were documented and closed	7210.634 ch 4	Quality Control	Compliant	24-Apr-2023	
157	Systemic Issue Reviews (SYSIR)	SYSIRs are conducted when issues that have potential system impact have been identified and are completed in accordance with applicable directive	7210.634 par 4-5	Quality Control	Compliant	24-Apr-2023	
158	Taxi/Ground Movement Procedures	Controllers provide clearance instructions using prescribed procedures and phraseology	7110.65 par 3-7-1 through 3-7-4; 7210.3 par 10-3-11; AC 120-57A	Operations	Compliant	24-Apr-2023	
159	TCAS/TAWS	Controllers handle TCAS/TAWS resolution advisories and reporting as required	7110.65 par 2-1-28	Operations	Compliant	24-Apr-2023	

162	TM Responsibilities of FLM/CIC and ATCS	FLM/CICs and ATCSs work to manage flows of traffic as required	7110.65 par 11-1-2b and c	Operations	Compliant	24-Apr-2023	
163	Tower Radar Displays	Use of tower radar displays	7110.65 par 3-1-9; 7210.3 par 10-5-3	Operations	Compliant	24-Apr-2023	
164	Traffic Advisories	Controllers apply traffic advisories as required	7110.65 par 2-1-21	Operations	Compliant	24-Apr-2023	
365	Unmanned Aircraft Systems (UAS)	Air Traffic Managers are responsible to designate primary and secondary UASFM Point of Contact (POC). Facility processes Certificate of Waiver or Authorization (COA).		Administrative	Compliant	24-Apr-2023	
364	USAFM & Low Altitude Authorization Notification Capability (LAANC)	ATM is responsible to have a current Certificate of Authorizations (COAs), if print copies retained, verify data within LAANC. 1. Review the "Facility Preferences" page to ensure the "Approval Facilities" information is correct. 2. Ensure UASFM Grid Altitudes created, with collaboration from NATCA, reflect what the facility imputed into the UASFM mailbox. 3. UASFM have been reviewed in the past 12 months 4. Facility no longer conducts mitigations or further coordination		Operations	Compliant	24-Apr-2023	

		through LAANC.					
170	Vectoring to Final Approach	Aircraft were vectored to the final approach course to intercept at the applicable point using proper procedures and phraseology	7110.65 par 5-9-1 through 5-9-3	Operations	Compliant	24-Apr-2023	
171	Vehicular Traffic	Controllers use prescribed procedures and phraseology regarding the movement of vehicular traffic	7110.65 par 3-1-3d; 3-1-5; 3-7-6; 3-7-1b	Operations	Informational	24-Apr-2023	
174	VFR-on-Top	Controllers use standard procedures and phraseology for applying VFR-on-top	7110.65 par 7-3-1; 7-3-2 and 9-3-3	Operations	Not Observed	24-Apr-2023	
175	Visibility Chart Developed/Maintained/Marked	Visibility charts are available (as needed) to meet required elements of prescribed procedures	7210.3 par 2-9-6	Operations	Compliant	24-Apr-2023	
176	Visual Approaches	Controllers use standard procedures and phraseology for applying Visual Approaches	7110.65 ch 7 sec 4	Operations	Compliant	24-Apr-2023	
177	Visual Scanning	Controllers visually scan runways on a continuous basis	7110.65 3-1-12	Operations	Noncompliant - Low	24-Apr-2023	
178	Visual Separation	Controllers use standard procedures and phraseology for the application of visual separation	7110.65 par 7-2-1a and c	Operations	Compliant	24-Apr-2023	
179	Wake Turbulence	Controllers apply standard separation and advisories for flights impacted by wake turbulence	7110.65 par 2-1-19; 2-1-20 and 5-5-4e; N JO 7110.582	Operations	Compliant	24-Apr-2023	

184	Weather Familiarization	Controllers/Specialists become familiar with pertinent weather information when coming on duty, and stay aware of current weather information needed to perform ATC duties	7110.65 par 2-6-1	Operations	Noncompliant - Low	24-Apr-2023	
186	Weather Processing	Receipt and dissemination of weather products	7110.65 par 2-9-2b; 7210.3 par 2-9-2; 2-9-4; 2-9-9 and 10-3-1	Operations	Compliant	24-Apr-2023	
187	Weather/Chaff Services	Controllers use correct procedures and phraseology for reporting weather and chaff information to pilots and other affected facilities	7110.65 par 2-6-4	Operations	Not Observed	24-Apr-2023	

POSITION LOG						
Fac ID:	BNA	Log Date:	5/15/2024			
Pos ID:	DRW	Pos Type:	DR			
TIME ON	Initials	TIME OFF	Code	Where Combined To:		
				Pos ID	Pos Type	
0500		0953		LC1	LC	
0954	CC	1102	S			
1103	CA	1152	C			
1153	HN	1230	C			
1231	CA	1253	C			
1254	JR	1307	C			
1308	JR	1350	C			
1308	MW	1350	T			
1351	MU	1435	C			
1436	JR	1616	C			
1436	MW	1616	T			
1617	CA	1727	C			
1728	KG	1818	C			
1819	EE	1846	C			
1847	KG	1932	C			
1933	DX	2052	C			
2053	HN	2136	C			
2137	BB	2305	C			
2306	EE	0009	C			
0010	KK	0110	S			

FAA Form 7230-10 (Electronic)

[illegible]

POSITION LOG						
Fac ID: BNA Pos ID: DRE		Log Date: 5/15/2024 Pos Type: DR				
TIME ON	Initials	TIME OFF	Code	Where Combined To:		
				Pos ID	Pos Type	
0500		0952		LC1	LC	
0953		1145		DRW	DR	
1146	CJ	1146	C			
1147	CJ	1224	C			
1147	II	1224	T			
1225	WM	1312	C			
1313	CJ	1453	C			
1313	II	1453	T			
1454	CL	1518	C			
1519	KG	1644	C			
1645	CL	1648	C			
1649	KG	1653	C			
1654	CL	1743	C			
1744	CJ	1831	C			
1832	JR	1941	C			
1942	EE	2041	C			
2042	RJ	2117	C			
2118	EE	2230	C			
2231	DX	2259	C			
2300	BP	2348	C			

FAA Form 7230-10 (Electronic)

[illegible]

POSITION LOG						
Fac ID: BNA		Log Date: 5/15/2024				
Pos ID: FRE		Pos Type: FR				
TIME ON	Initials	TIME OFF	Code	Where Combined To:		
				Pos ID	Pos Type	
0500		1152		LC1	LC	
1153	KG	1228	C			
1229		1331		ARE	AR	
1332	CL	1446	C			
1447		1529		ARE	AR	
1530		1613		ARE	AR	
1614	WM	1752	C			
1753	HN	1830	C			
1831	RJ	1937	C			
1938	BP	2129	C			
1938	CB	2129	T			
2130	DX	2228	C			
2229		2324		ARE	AR	
2325	KK	2336	S			
2337		0306		ARE	AR	
0307		0459		LC2	LC	

FAA Form 7230-10 (Electronic)

POSITION LOG

Fac ID: BNA

Log Date: 5/15/2024

Pos ID: WS

Pos Type: SI

[illegible]

FAA Form 7230-10 (Electronic)

[illegible]

POSITION LOG

Fac ID: BNA

Log Date: 5/15/2024

Pos ID: ARW

Pos Type: AR

[illegible]

FAA Form 7230-10 (Electronic)

POSITION LOG

Fac ID: BNA

Pos ID: AD

Log Date: 5/15/2024

Pos Type: DI

[illegible]

FAA Form 7230-10 (Electronic)

POSITION LOG

Fac ID: BNA

Pos ID: C11

Log Date: 5/15/2024

Pos Type: CI

[illegible]

FAA Form 7230-10 (Electronic)

POSITION LOG

Fac ID:	BNA
Pos ID:	CI2

Log Date: 5/15/2024
Pos Type: CI

[illegible]

FAA Form 7230-10 (Electronic)

POSITION LOG

Fac ID: BNA

Log Date: 5/15/2024

Pos ID: DD

Pos Type: DI

[illegible]

FAA Form 7230-10 (Electronic)

POSITION LOG

Fac ID:	BN A	Log Date:	5/15/2024
Pos ID:	FR W	Pos Type:	FR

Log Date: 5/15/2024
Pos Type: FR

[illegible]

FAA Form 7230-10 (Electronic)

POSITION LOG

Fac ID: BNA

Log Date: 5/15/2024

Pos ID: SI

Pos Type: SI

TIME ON	Initials	TIME OFF	Code	Where Combined To:	
				Pos ID	Pos Type
0500		1013		SC	SC
1014	LM	1030	C		
1031	NG	1152	C		
1153	TK	1153	S		
1154		1304		Closed	
1305	KG	1336	C		
1337		2011		WS	SI
2012	RJ	2039	C		
2040		2341		WS	SI
2342	BB	2347	C		
2348		0240		WS	SI
0241	BP	0307	C		
0308		0459		AD	DI

FAA Form 7230-10 (Electronic)

POSITION LOG

Fac ID:	BNA	Log Date:	5/15/2024
Pos ID:	SRE	Pos Type:	SR

Log Date: 5/15/2024
Pos Type: SR[illegible]

FAA Form 7230-10 (Electronic)

Corrective Action Plan

BNA-CAP-2023-0001

Subject: Phraseology

Safety Monitoring Watchlist

NA - Not Applicable

Risk or Hazard

Using incorrect or excessive verbiage is not in compliance with FAA JO 7110.65. This misuse can lead to misunderstandings with pilots and/or fellow ATCS' which can, therefore, lead to potential safety events.

Validated Safety Issue(s)

Basic phraseology is not used consistently or correctly at BNA ATCT/TRACON. Using incorrect or excessive verbiage is routinely a causal factor in many air traffic accidents and safety events.

Pertinent Regulations

7110.65 - 2-1-17, Radio Communications
 7110.65 - 2-4-12, Interphone Message Format
 7110.65 - 2-4-13, Interphone Termination
 7110.65 - 2-4-15, Emphasis for Clarity
 7110.65 - 2-4-20, Call Sign Usage
 7110.65 - 5-6-2, Route Assignment
 7110.65 - 5-7-2, Speed Adjustment
 Other - SOP, Position Relief Briefing

Mitigation Plan

Mitigation 1

Type	Level	Target Completion Date	
Other	Facility	Apr 21, 2023	☒ Complete

Details

Update OSA Facility Special Emphasis Items to ensure inclusion of major phraseology issues. Add a Facility Special Emphasis Item of "uses prescribed phraseology". In the Standard Items, phraseology will be broken down into the more specific issues.

Mitigation 2

Type	Level	Target Completion Date	
Briefing	Facility	Jul 31, 2023	☒ Complete

Details

Brief facility on major phraseology errors and advise of upcoming Tape Talks.

Mitigation 3

Type	Level	Target Completion Date	
Review	Facility	Jan 31, 2024	☒ Complete

Details

All operational personnel will receive a Tape Talk. This review will be held with the OS of record or the OM. At the conclusion of the review, the manager will submit a PROC highlighting the areas needing improvement as well as the areas which meet expectations. Tape Talks will be conducted on moderately busy traffic sessions and, preferably, on a Departure position or highest certification achieved if not certified on Departure.

Corrective Action Plan

BNA-CAP-2023-0001

Monitoring Plan			
Monitoring Item 1			
Type Audit	Level Facility	Target Completion Date Jan 31, 2024	☒ Complete
Details Once Tape Talks begin, audit the PROCs monthly to ensure both Tape Talks and PROCs are occurring.			
Effectiveness Target 90% complete at the end of the cycle will mark complete.			
Monitoring Results 95% of the PROCs have occurred and are logged in CEDAR.			
Monitoring Item 2			
Type Audit	Level Facility	Target Completion Date Dec 31, 2023	☒ Complete
Details QC will audit the OSAs monthly for the Phraseology Items and report findings to Facility Management.			
Effectiveness Target 80% compliance for a three-month period will be considered effective for this CAP.			
Monitoring Results Audit from July 1, 2023 through December 6, 2023 shows all items being audited are over 80% compliant.			
CAP Approval			
☒ Approved Approved By: Keeta Vaughn Approved Date: May 9, 2023 ☐ Not Approved			
Resolution Approval			
☒ Approved Approved By: Tim Harper Approved Date: Jan 17, 2024 ☐ Not Approved			
Additional details The target effectiveness of the OSA's met requirements.			

System Service Review

BNA-S-2024/05/15-0001

A1. FAC ID			A2. Date UTC (mm/dd/yyyy)							A3. Start Time UTC				A4. End Time UTC				A5. Position	
B	N	A	0	5	1	5	2	0	2	4	1	6	5	1	1	7	0	8	DEPARTURE WEST
A6. Aircraft #1										A7. Aircraft #2									
Aircraft ID			Aircraft Type/Suffix			IFR/VFR				Aircraft ID			Aircraft Type/Suffix			IFR/VFR			
N47WT			BE35			IFR													
Training																			
1. Were any training issues identified?																			
☐ Yes ☒ No																			
Weather																			
1. What were the prevailing weather conditions?																			
☐ IFR ☒ VFR ☐ Other																			
2. Was any pertinent precipitation depicted on the radar?																			
☒ Yes ☐ No																			
If yes, explain																			
A small Level 1 area of precipitation was depicted until 1659:40z in the vicinity of N47WT's immediate route of flight. There were other areas of Level 1 precipitation in DRW's airspace. DRE's airspace had Level 1 and 2 cells displayed.																			
3. Did LLWAS alert?																			
☐ Yes ☐ No ☒ N/A																			
4. Were weather phenomena a factor?																			
☒ Yes ☐ No																			
☐ Turbulence ☐ Icing ☐ Thunderstorm ☒ Low Ceilings ☐ Break Conditions ☐ Wind Shear ☐ Other																			
5. Were any SIGMETs or PIREPs in effect?																			
☒ Yes ☐ No																			
If yes, explain																			
The low ceilings in the airspace required PIREPS to be solicited/disseminated. DRE received a PIREP from SKW3729 at 1636z; the PIREP was a base and top report. This PIREP was not initially entered into AISR. There was a PIREP entered into AISR at 1607z which was also a base report.																			
Efficiency																			
1. Were any efficiency issues identified?																			
☐ Yes ☒ No																			
Airspace/Airport																			
1. Were any airspace/airport issues identified?																			
☐ Yes ☒ No																			
Procedures																			
1. Were any procedural issues identified?																			
☐ Yes ☒ No																			

System Service Review

BNA-S-2024/05/15-0001

Directives	
1. Were any directive issues identified?	☐ Yes ☒ No
Equipment	
1. Were any equipment issues identified?	☒ Yes ☐ No
2. Was all communications equipment functioning properly?	☒ Yes ☐ No
3. Was all airborne radar equipment functioning properly?	☐ Yes ☒ No ☐ N/A
If No, explain The following weather equipment were logged as OTS on FAA Form 7230-4: * Circular weather OTS * Level 6 weather works in linear mode * ASR weather intermittent	
4. Was all surface detection radar equipment functioning properly?	☐ Yes ☐ No ☒ N/A
5. Was all approach NAVAID equipment functioning properly?	☒ Yes ☐ No ☐ N/A
6. Was all airport lighting equipment functioning properly?	☐ Yes ☐ No ☒ N/A
7. Was all operational automation radar equipment functioning properly? (i.e. HOST, STARS, ARTS, ASDE, etc.)	☒ Yes ☐ No ☐ N/A
8. Was all operational automation radar equipment configured correctly? (i.e. airspace combination, ASDE configuration, etc.)	☒ Yes ☐ No ☐ N/A
9. Was all inoperative equipment properly coordinated as out of service across ATO organizations? (i.e. En-Route, Terminal, Sys Ops, Tech Ops, etc.)	☒ Yes ☐ No ☐ N/A
10. Was all inoperative equipment properly NoTAMed as out of service?	☐ Yes ☐ No ☒ N/A

System Service Review

BNA-S-2024/05/15-0001

Equipment (continued)	
11. Were any potential systemic equipment issues identified? ☒ Yes ☐ No If Yes, explain During the NTSB/ERT review, it was found that two of the weather equipment outages had been on FAA Form 7230-4, Facility Daily Log, for at least a year. The ASR weather intermittent was entered on the log on March 8, 2024. Additionally, the ERT found that the Integrated Terminal Weather System (ITWS) and the weather that the STARS displayed did not match. The STARS displayed a lower precipitation intensity than the ITWS.	
Customer Feedback	
1. Was there customer feedback regarding the operation during this review session? ☐ Yes ☒ No	
Resource Management	
1. Were any resource management issues identified? ☐ Yes ☒ No	
Individual Performance	
1. Was any notable Individual performance identified? (Exemplary and/or needing improvement) ☒ Yes ☐ No	
	Position DEPARTURE WEST
Explanation During the time leading up to the event, BNA underwent a runway change which required coordination with JWN and two ZME sectors. There was also coordination completed reference N47WT wanting to deviate (from ZME) and requesting higher (from BNA). There was an inbound to JWN and JWN requesting a clearance on a different aircraft. There were multiple inbounds to BNA via the CHSNE arrival which was in the vicinity of N47WT. POSITIVE: * DRW quickly recognized the altitude discrepancy (N47WT indicating 9500') and questioned the pilot multiple times. * DRW observed N47WT making a right turn southbound and questioned the pilot. There was no communication with the pilot at this point. * DRW made numerous attempts, utilizing different resources, to re-establish communication with N47WT. NEEDS IMPROVEMENT: * DRW dropped the full call sign with N47WT four times; DRW dropped the call sign with another aircraft one time. * DRW dropped the "N" or "type aircraft" five times with N47WT and two times with other aircraft. * DRW did not issue depicted weather IAW FAAO 7110.65. * DRW did not use operating initials to terminate interfacility coordination.	

System Service Review

BNA-S-2024/05/15-0001

QC Findings

The following persons also attended the SSR: Priscilla Russell, Will Chamberlain, Peepsie James, Paul Hanna, Jason Freeman, Frederick Steele, Curt Burrington, and Matthew Miller.

This SSR is in response to an aircraft accident. N47WT came over to BNA DRW deviating left/right of course and requesting to climb to 9000'. After N47WT appeared to be tracking a north heading, DRW issued them a 360 heading for traffic arriving BNA. The aircraft's altitude had shown above the issued 9000' during this time. BNA then asked if N47WT would be able to proceed on course, was answered in the affirmative, and issued N47WT direct EWO. DRW questioned the altitude multiple times. The pilot responded they were descending. N47WT then began a sharp right turn and descent. The RADAR data block dropped off when N47WT was indicating 7800'.

FINDINGS:

- * The ERT discovered a discrepancy between what ITWS displays versus what STARS displays; STARS displays a lower intensity of precipitation than ITWS.
- * PIREP solicitation/dissemination was not done IAW FAAO 7110.65 in the hours before and after the accident.
- * Issuing depicted weather was not done IAW FAAO 7110.65.

RECOMMENDATIONS:

- * Revisit previous CAP reference PIREP solicitation/dissemination & issuing depicted weather to determine what worked and reinstate those mitigations.
- * Operations Manager/Support Manager ensure PIREPs are being solicited when weather conditions warrant them.
- * Reinstate morning stand-ups to ensure all personnel are on the same page.
- * Utilizing Article 45 personnel during weather events to assist in entering PIREPs in AISR.
- * Remind personnel to select the button on NIDS that facility is in PIREP conditions to bring a shared awareness to all operational personnel.
- * Work with SSC to ensure they are aware of what equipment issues are being carried over on the facility Daily Log.

Review Team

Andrew Roberts
Jeremiah Lee
Tawnya Weber
Anthony Forcum
Tim Harper
Cathleen North

Covered Event Review

BNA-C-2024/05/15-0001

A1. FAC ID			A2. Date UTC (mm/dd/yyyy)							A3. Start Time UTC				A4. End Time UTC				A5. Position	
B	N	A	0	5	1	5	2	0	2	4	1	6	5	1	1	7	0	8	DEPARTURE WEST
A6. Aircraft #1										A7. Aircraft #2									
Aircraft ID			Aircraft Type/Suffix			IFR/VFR				Aircraft ID			Aircraft Type/Suffix			IFR/VFR			
N47WT			BE35			IFR													
Individual Performance																			
2. Employee #1																			
Employee									Position					ATSAP Filed					
Allyn, Cris C (CA)									DEPARTURE WEST					Yes					
Explanation N47WT, IFR BE35 overflight, requested 9000' when checking in with BNA DRW. DRW issued N47WT instructions to climb to 9000'. At 1659z, N47WT was observed at 9500'; DRW instructed N47WT to maintain 9000' and issued the BNA altimeter. N47WT responded that they were descending; this was the last radio communication received from the aircraft. At 1701z, N47WT appeared to be in a tight right turn and descending below 9000'. At 1702z, radar contact was lost with N47WT indicating 7800'. Performance issues identified: DRW did not self-identify or issue the BNA altimeter upon check in PIREPS not solicited by DRW Did not issue the depicted Level 1 weather Multiple times of dropping call signs																			
Training																			
1. Were any training issues identified?																			
☐ Yes ☒ No																			
Weather																			
1. What were the prevailing weather conditions?																			
☐ IFR ☒ VFR ☐ Other																			
2. Was any pertinent precipitation depicted on the radar?																			
☒ Yes ☐ No																			
If yes, explain There was Level 1 and Level 2 weather depicted in the DRE sector. There was Level 1 weather depicted in the DRW sector. The weather was fluctuating in both sectors. DRW sector had a short depiction (58 seconds) of Level 1 weather that was in N47WT's route of flight.																			
3. Did LLWAS alert?																			
☐ Yes ☐ No ☒ N/A																			
4. Were weather phenomena a factor?																			
☒ Yes ☐ No																			
☐ Turbulence ☐ Icing ☐ Thunderstorm ☒ Low Ceilings ☐ Break Conditions ☐ Wind Shear ☐ Other																			

Covered Event Review
BNA-C-2024/05/15-0001

Weather (continued)
5. Were any SIGMETs or PIREPs in effect? ☒ Yes ☐ No If yes, explain There was a PIREP at 1607z for BNA290020 E175 reported OVC022 base report.
Airspace/Airport
1. Were any airspace/airport issues identified? ☐ Yes ☒ No
Procedures
1. Were any procedural issues identified? ☐ Yes ☒ No
Directives
1. Were any directive issues identified? ☐ Yes ☒ No
Equipment
1. Were any equipment issues identified? ☒ Yes ☐ No
2. Was all communications equipment functioning properly? ☒ Yes ☐ No
3. Was all airborne radar equipment functioning properly? ☐ Yes ☐ No ☒ N/A
4. Was all surface detection radar equipment functioning properly? ☐ Yes ☐ No ☒ N/A
5. Was all approach NAVAID equipment functioning properly? ☐ Yes ☐ No ☒ N/A
6. Was all airport lighting equipment functioning properly? ☐ Yes ☐ No ☒ N/A
7. Was all operational automation radar equipment functioning properly? (i.e. HOST, STARS, ARTS, ASDE, etc.) ☐ Yes ☒ No ☐ N/A If No, explain ASR weather has been reported to AOCC as intermittent since March 8, 2024. Circular polarization has been logged out of service for over a year. Level 6 weather has worked in linear mode only for over a year.

Covered Event Review
BNA-C-2024/05/15-0001

Equipment (continued)	
8.	Was all operational automation radar equipment configured correctly? (i.e. airspace combination, ASDE configuration, etc.) ☒ Yes ☐ No ☐ N/A
9.	Was all inoperative equipment properly coordinated as out of service across ATO organizations? (i.e. En-Route, Terminal, Sys Ops, Tech Ops, etc.) ☒ Yes ☐ No ☐ N/A
10.	Was all inoperative equipment properly NoTAMed as out of service? ☐ Yes ☐ No ☒ N/A
11.	Were any potential systemic equipment issues identified? ☒ Yes ☐ No If Yes, explain Some weather equipment has been reported to AOCC as OTS for over a year. Tech Ops will be invited to the SSR for this event to discuss this issue in more detail. SSR is scheduled for May 28th.
Resource Management	
1.	Were any resource management issues identified? ☐ Yes ☒ No
Additional Comments	
NATCA and Management reviewed raw STARS data prior to the CER. The training department was queried as to whether classroom/sim training contains weather; the response was affirmative. Management verified what equipment was out of service with Tech Ops.	
QC Comments	
Any corrective action will be addressed at the conclusion of the SSR associated with this event. This is scheduled for May 28, 2024. In the interim, a PIREP and Depicted Weather briefing is being briefed to the facility via TEAM as a pre-duty item. Local Safety Council will be tasked to identify any needed training/refresher. The OS and ATCS received PROCs.	
Review Team	
Cris Allyn Jeremiah Lee Tim Harper Tawnya Weber Cathleen North	



Federal Aviation Administration

Memorandum

Date: June 04, 2024

To: Gene Burdick , Acting Director, Eastern Service Center

From: [REDACTED] 151724-0500
Andrew B. Roberts , Acting Manager
Nashville Airport Traffic Control Tower

Subject: **INFORMATION:** Certification Statement
Aircraft Accident, N47WT
Franklin, TN, May 15, 2024

I certify that aircraft accident package, 24-002-BNA, has been reviewed and is complete.

Copy

Aircraft Accident Package

24-002-BNA

N47WT, BE35

May 15, 2024, 1702 UTC

Destroy: May 15, 2029 UTC

SECTION 1.
Table of Contents

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SECTION 2.

FAA Form 8020-6, Report of Aircraft Accident, and
FAA Form 8020-6-1, Report of Aircraft Accident, (Continuation Sheet)

FAA Form 8020-6, Report of Aircraft Accident

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				REPORT DATE June 06, 2024		REPORT NO. 24-002-BNA	
REPORT OF AIRCRAFT ACCIDENT				NAME OF REPORTING FACILITY Nashville ATCT (BNA)			
1. AIRCRAFT IDENTIFICATION AND TYPE N47WT, BE35		2. DATE/TIME OF ACCIDENT (UTC) May 15, 2024; 1702 UTC		3. LOCATION OF ACCIDENT: CITY, STATE (MAND) Franklin, TN			
4. NATURE OF ACCIDENT Aircraft had an inflight break up.				LATITUDE/LONGITUDE (OPL) N35 50 19.4244 W08 70 408.4612			
				5. TYPE OF FLIGHT IFR Flight Plan			
6. FLIGHT CREW	NAME	POSITION	ADDRESS (CITY AND STATE)	UNINJURED	INJURED	FATALITY	UNKNOWN
	[REDACTED]	Pilot	Baton Rouge, LA			X	
7. PASSENGER DATA		NUMBER ABOARD AIRCRAFT	2	NUMBER UNINJURED	0	NUMBER INJURED	0
				NUMBER FATALITIES	2		
8. AIRCRAFT DAMAGE Destroyed				9. PROPERTY DAMAGE Unknown			
10. OPERATING STATUS OF NAVIGATIONAL AIDS/LIGHTS/COMMUNICATIONS Normal							
11. WEATHER DATA (USE UTC DATE/TIME)	REPORT JUST PRIOR TO ACCIDENT NASHVILLE METAR 1653 UTC: wind three zero zero at nine, visibility one zero statute miles, two thousand three hundred few clouds, ceiling three thousand six hundred broken, towering cumulus, five thousand five hundred broken, temperature two three, dew point one six, altimeter two nine seven seven						
	FIRST REPORT SUBSEQUENT TO ACCIDENT NASHVILLE METAR 1753 UTC: wind two eight zero at seven, visibility one zero statute miles, three thousand six hundred scattered, towering cumulus, ceiling four thousand eight hundred broken, temperature two three, dew point one six, altimeter two nine seven eight						
12. ATO PERSONNEL INVOLVED	NAME	FACILITY	OPERATING POSITION			CHECK IF EYEWITNESS	
	Travis Fielek *(GP)	ZME ARTCC	R65 R				
	Jeremy Bahadirli (JZ)	ZME ARTCC	R65 R				
	Lindsay Repp (LR)	ZME ARTCC	R13 R				
	Amy Jolly (TJ)	ZME ARTCC	R13 R				
	Jonathan Taylor (JT)	ZME ARTCC	R13 R				
	John Edoff (GO)	ZME ARTCC	R14 R				
	Paul Nelson (PK)	ZME ARTCC	D14 RA				
* OPERATING INITIALS							
13. SIGNATURE OF FACILITY MANAGER Andrew B. Roberts [REDACTED] Date: 2024.06.07 08:37:22 -05'00'							

24-002-BNA

N47WT



**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**
REPORT OF AIRCRAFT ACCIDENT
(Continuation Sheet)

REPORT DATE

June 04, 2024

REPORT NO.

24-002-BNA

NAME OF REPORTING FACILITY

Baton Rouge CCF (BTR)

14. CHRONOLOGICAL SUMMARY OF FLIGHT

May 15, 2024

ALL TIMES BELOW ARE COORDINATED UNIVERSAL TIME
UNLESS OTHERWISE SPECIFIED

1345 N47WT checked in with BTR and was issued IFR clearance at Louisiana Regional Airport (KREG).

1353 N47WT departed KREG.

1354 N47WT was radar identified by Radar East (RE).

1400 An automated radar hand off was initiated to Houston ARTCC (ZHU), Picayune (PCU) Sector. NOTE: Time shown was 00:00. Actual time is unknown.

1401 N47WT was radar identified by ZHU, PCU Sector.

1406 Communications for N47WT were transferred to ZHU, PCU Sector, 126.8

No More Follows



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
REPORT OF AIRCRAFT ACCIDENT
(Continuation Sheet)

REPORT DATE

May 22, 2024

REPORT NO.

24-002-BNA

NAME OF REPORTING FACILITY

Houston ARTCC (ZHU)

14. CHRONOLOGICAL SUMMARY OF FLIGHT

May 15, 2024

ALL TIMES BELOW ARE COORDINATED UNIVERSAL TIME
UNLESS OTHERWISE SPECIFIED

1407 N47WT called onto Houston Air Route Traffic Control Center (ZHU) Picayune Radar Sector (R27) leaving eight thousand five hundred feet for nine thousand feet. ZHU R27 acknowledged and issued the McComb, Mississippi altimeter. N47WT acknowledged.

1423 ZHU R27 assigned N47WT seven thousand feet for active military airspace along their route of flight. N47WT acknowledged the clearance.

1443 ZHU R27 switched N47WT to Memphis Air Route Traffic Control Center (ZME). N47WT acknowledged.

No More Follows



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
REPORT OF AIRCRAFT ACCIDENT
(Continuation Sheet)

REPORT DATE

May 23, 2024

REPORT NO.

24-002-BNA

NAME OF REPORTING FACILITY

Jackson (MS) ATCT (JAN)

14. CHRONOLOGICAL SUMMARY OF FLIGHT

May 15, 2024

ALL TIMES BELOW ARE COORDINATED UNIVERSAL TIME
UNLESS OTHERWISE SPECIFIED

1452 N47WT checks in with Jackson Approach Control (JAN) at 7,000. East Radar issues the JAN Altimeter (29.86).

1502 N47WT is handed off to Memphis Center and issued a frequency change (125.97).

No More Follows

FAA Form 8020-6-1 (12-18) Supersedes Previous Edition

24-002-BNA

N47WT

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 DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION REPORT OF AIRCRAFT ACCIDENT (Continuation Sheet)	REPORT DATE May 20, 2024	REPORT NO. 24-002-BNA
	NAME OF REPORTING FACILITY Memphis ARTCC (ZME)	

14. CHRONOLOGICAL SUMMARY OF FLIGHT
May 15, 2024

ALL TIMES BELOW ARE COORDINATED UNIVERSAL TIME
UNLESS OTHERWISE SPECIFIED

1443 N47WT checked on Memphis Air Route Traffic Control Center (ZME) combined Kewanee (EWA) and Jackson (JAN) Low Altitude radar control positions, R65/R66, level at seven thousand feet. R65 issued N47WT the Jackson, Mississippi (MS) altimeter setting. N47WT acknowledged.

1452 R65 switched N47WT to Jackson Approach Control (JAN). N47WT acknowledged.

1503 N47WT checked on ZME R65 frequency, level at seven thousand feet. R65 issued N47WT Golden Triangle Airport, Columbus, MS altimeter setting. N47WT acknowledged.

1517 R65 switched N47WT to its one three two point seven five frequency. N47WT acknowledged.

1532 R65 switched N47WT to Columbus Approach Control (CBM) frequency. N47WT acknowledged.

1607 N47WT checked on ZME combined Columbus (UBS) and Hamilton (HAB) Low Altitude radar control positions, R12/R13, level at seven thousand feet. R13 issued N47WT Muscle Shoals, Alabama altimeter setting. N47WT acknowledged.

1620 R13 position relief briefing conducted.

1626 R13 switched N47WT to ZME combined Holly Springs (HLI) and Graham (GHM) Low Altitude radar control positions, R14/R42. N47WT acknowledged.

1627 N47WT checked on R14 frequency level at seven thousand feet. R14 issued N47WT Nashville, Tennessee (TN) altimeter setting. N47WT acknowledged.

1635 R14 broadcasted a Pilot Report (UA) received from a Boeing seven three seven, northeast of Memphis, TN at flight level three three zero.

1642 N47WT requested a short deviation. R14 issued N47WT twenty degrees left or right of course direct Louisville, Kentucky when able. N47WT acknowledged.

1651 N47WT requested higher altitude and R14 switched him to Nashville Approach Control (BNA) to make his request. Radar associate position, D14, informed BNA that N47WT was deviating.

1652 BNA informed D14 that BNA was switching to Northbound and requested control for higher on N47WT. D14 released control of N47WT.

1714 BNA Operations Supervisor informed ZME Watch Desk of a possible crash involving N47WT.

FAA Form 8020-6-1 (12-18) Supersedes Previous Edition
24-002-BNA
N47WT



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
REPORT OF AIRCRAFT ACCIDENT
(Continuation Sheet)

REPORT DATE

May 20, 2024

REPORT NO.

24-002-BNA

NAME OF REPORTING FACILITY

Memphis ARTCC (ZME)

14. CHRONOLOGICAL SUMMARY OF FLIGHT

1716 ZME Watch Desk informed the facility upper management of the situation, and issued an Alert Notice (ALNOT).

1724 ZME Watch Desk provided the Search and Rescue Center an update on N47WT ALNOT.

1725 The Search and Rescue Center inquired if local law enforcement had been contacted. ZME Watch Desk said BNA Watch Desk would be handling that process.

1726 ZME Watch Desk verified with BNA Watch Desk that local law enforcement had been notified and was given an update on N47WT.

1727 ZME Watch Desk called and updated the Search and Rescue Center of N47WT situation. ZME Flight Data Unit conducted a position relief briefing which included ALNOT N47WT.

1728 ZME Watch desk received a call from Fort Worth Leidos Flight Service Station providing pilot information.

1731 ZME Watch Desk contacted Joint Air Traffic Operations Command (JATOC) about ALNOT N47WT.

1733 ZME Watch Desk instructed BNA Supervisor to submit complete Preliminary Aircraft Accident/Incident Report.

No More Follows

 DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION REPORT OF AIRCRAFT ACCIDENT (Continuation Sheet)	REPORT DATE June 07, 2024	REPORT NO. 24-002-BNA
	NAME OF REPORTING FACILITY Nashville ATCT (BNA)	

14. CHRONOLOGICAL SUMMARY OF FLIGHT
May 15, 2024

ALL TIMES BELOW ARE COORDINATED UNIVERSAL TIME
UNLESS OTHERWISE SPECIFIED

1651 Memphis ARTCC (ZME) called Nashville (BNA) ATCT Departure Radar West (DRW) to coordinate N47WT deviating left or right of course. DRW approved the request.

1652 N47WT checked in with DRW requesting 9000 feet. DRW coordinated with ZME for the higher altitude. ZME approved the request. DRW instructed N47WT to climb to 9000 feet.

1657 DRW instructed N47WT to fly heading 360 for traffic into BNA and told N47WT to expect on course in fifteen miles.

1658 DRW asked N47WT if they were able to proceed on course to New Hope VOR (EWO). N47WT advised DRW they could not go direct EWO and stay on the 360 heading. DRW asked N47WT that in reference to the deviation they were on, could they go on course to EWO. N47WT advised they could. DRW instructed N47WT to proceed direct to EWO.

1659 DRW instructed N47WT to maintain 9000 feet, stated they were indicating 9500 feet, and issued Nashville altimeter.

1700 N47WT advised DRW they were descending to 9000 feet. DRW advised N47WT they were still indicating 9400 feet. N47WT stated again that they were descending to 9000 feet.

1702 DRW advised N47WT they were turning southbound. There is no response from N47WT. DRW attempted to contact N47WT three more times with no response.

1703 DRW issued N47WT RADAR contact lost.

1704 DRW asked SWA6129 to attempt contact with N47WT. There was no response from N47WT.

1705 DRW attempted to contact N47WT on guard frequency. There was no response.

1708 DRW attempted to contact N47WT. There was no response.

Block 12. ATO Personnel Involved, Continued.
 Cris Allyn (CA), BNA ATCT, DRW DR
 Anthony Forcum (TK), BNA ATCT, WS SI
 Marion Waters (MW), BNA ATCT, SC SC
 Beau Branch (BX), ZME ARTCC, WS O
 Brian Bittick (DB), ZME ARTCC, WS O
 Jereme Smith (SG), ZME ARTCC, S3 F
 Reginald Ingram (RM), ZME ARTCC, S3 F

FAA Form 8020-6-1 (12-18) Supersedes Previous Edition

24-002-BNA
N47WT

 DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION REPORT OF AIRCRAFT ACCIDENT (Continuation Sheet)	REPORT DATE June 07, 2024	REPORT NO. 24-002-BNA
	NAME OF REPORTING FACILITY Nashville ATCT (BNA)	
14. CHRONOLOGICAL SUMMARY OF FLIGHT		
No More Follows		

SECTION 3.
Review of Services Memoranda



Federal Aviation Administration

Memorandum

Date: June 04, 2024

To: Nashville Airport Traffic Control Tower
Aircraft Accident File 24-002-BNA

Richard Alexander, Manager

From: Baton Rouge Combined Control Facility, BTR CCF

Subject: **INFORMATION**: Review of Services Memo
Aircraft Accident, N47WT
Franklin, TN, May 15, 2024

BTR CCF conducted a review of services concerning N47WT and was determined to have routine services. As a supporting facility with routine services I certify the following data has been retained in accordance with FAA Order 8020.16. Additionally, I certify that the following originals/digital copies of the original are on file at this facility.

Certified Original Copy(ies) of Voice Recording(s)
Certified Working Copy(ies) of Voice Recording(s)
FAA Form 8020-6-1
Falcon Bookmark
NVR Incident Export Files
STARS Adaptation File
STARS Plot Playback File (PPB)
STARS Radar Data (CDR)



Federal Aviation Administration

Memorandum

Date: May 22, 2024

To: Nashville Airport Traffic Control Tower
Aircraft Accident File 24-002-BNA

[REDACTED] Date: 2024.05.23 10:51:56 -0500
[REDACTED] Manager

From: Houston Air Route Traffic Control Center, ZHU ARTCC

Subject: **INFORMATION:** Review of Services Memo
Aircraft Accident, N47WT
Franklin, TN, May 15, 2024

ZHU ARTCC conducted a review of services concerning N47WT and was determined to have routine services. As a supporting facility with routine services I certify the following data has been retained in accordance with FAA Order 8020.16. Additionally, I certify that the following originals/digital copies of the original are on file at this facility.

Certified Original Copy(ies) of Voice Recording(s)
Certified Working Copy(ies) of Voice Recording(s)
DALR Incident Export Files
ERAM Local Adaptation File
ERAM Radar Files
ERAM SAR Files
FAA Form 8020-6-1



Federal Aviation Administration

Memorandum

Date: May 22, 2024

To: Nashville Airport Traffic Control Tower
Aircraft Accident File 24-002-BNA

Kawanna Proctor, Manager

From: Jackson (MS) Airport Traffic Control Tower, JAN ATCT

Subject: **INFORMATION**: Review of Services Memo
Aircraft Accident, N47WT
Franklin, TN, May 15, 2024

JAN ATCT conducted a review of services concerning N47WT and was determined to have routine services. As a supporting facility with routine services I certify the following data has been retained in accordance with FAA Order 8020.16. Additionally, I certify that the following originals/digital copies of the original are on file at this facility.

Certified Original Copy(ies) of Voice Recording(s)
Certified Working Copy(ies) of Voice Recording(s)
DALR Incident Export Files
FAA Form 8020-6-1
Falcon Bookmark
Flight Progress Strip(s)
STARS Adaptation File
STARS Plot Playback File (PPB)
STARS Radar Data (CDR)



Federal Aviation Administration

Memorandum

Date: May 20, 2024

To: Nashville Airport Traffic Control Tower
Aircraft Accident File 24-002-BNA

Will Chamberlain, Acting Manager

0500

08:17:34

From: Memphis Air Route Traffic Control Center, ZME ARTCC

Subject: **INFORMATION**: Review of Services Memo
Aircraft Accident, N47WT
Franklin, TN, May 15, 2024

ZME ARTCC conducted a review of services concerning N47WT and was determined to have pertinent services. As a supporting facility with pertinent services I certify the following data has been retained in accordance with FAA Order 8020.16. Additionally, I certify that the following originals/digital copies of the original are on file at this facility.

ALNOT Message
Certified Original Copy(ies) of Voice Recording(s)
Certified Working Copy(ies) of Voice Recording(s)
DALR Incident Export Files
Email(s)
ERAM Local Adaptation File
ERAM National Track Analysis Report
ERAM Radar Files
ERAM SAR Files
ERAM Skyrec file
ERAM Surveillance Track History Report
FAA Form 7230-10
FAA Form 7230-4
FAA Form 8020-6-1
Facility Preliminary Timeline with Falcon Link
Flight Progress Strip(s)
Personnel Log(s)
Pre-Duty Weather Briefing Product(s)
Pre-Duty Weather Completion Log(s)
System Service Review (SSR)
Weather Data



Federal Aviation Administration

Memorandum

Date: June 04, 2024

To: Nashville Airport Traffic Control Tower
Aircraft Accident File 24-002-BNA

Andrew B. Roberts , Acting Manager

From: Nashville Airport Traffic Control Tower, BNA ATCT

Subject: **INFORMATION:** Review of Services Memo
Aircraft Accident, N47WT
Franklin, TN, May 15, 2024

BNA ATCT conducted a review of services concerning N47WT and was determined to have pertinent services. As the holding facility with pertinent services I certify the following data has been retained in accordance with FAA Order 8020.16. Additionally, I certify that the following originals/digital copies of the original are on file at this facility.

Certified Original Copy(ies) of Voice Recording(s)
Certified Working Copy(ies) of Voice Recording(s)
Common Post Event Checklist
Covered Event Review (CER)
Email(s)
FAA Form 7230-10
FAA Form 7230-4
FAA Form 8020-3
FAA Form 8020-6
FAA Form 8020-6-1
FAA Form 8020-9
Facility Layout Chart(s)
Falcon Bookmark
Flight Progress Strip(s)
Mandatory Occurrence Report (MOR)
NVR Incident Export Files
Personnel Log(s)
Pre-Duty Weather Briefing Product(s)
Pre-Duty Weather Completion Log(s)
STARS Adaptation File
STARS Plot Playback File (PPB)
STARS Radar Data (CDR)
System Service Review (SSR)
UTC Time Conversion Chart
Weather Data

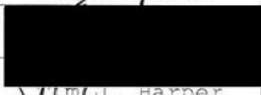
SECTION 4.

FAA Form(s) 7230-4, Daily Record of Facility Operation

DAILY RECORD OF FACILITY OPERATION				PAGE NO Page 1 of 1
				DATE May 15, 2024
LOCATION	IDENTIFICATION	TYPE FACILITY	OPERATING POSITION	
Memphis, TN	ZME	ARTCC	ZME Watch Desk W. Chamberlain	
UTC TIME	REMARKS			
0500	CFPL: FSM / RZC ATC Alert for Comms CFPL: TUP ATC Alert for power. CFPL: TUL ATC Alert for Comms CFPL: GPS Mission: FTJNLA 24-18: Active Daily, 4/30/24 - 5/17/24, 0001Z - 1259Z. POC Robert Voss 337-531-2701. Stop Buzzer 337-531-9505. CFPL: GPS Mission: MSOCMS 24 - 01: Active Daily, 5/4/24 - 6/4/24 2300 - 2359Z and 5/18/24 - 6/1/24 0000 - 0200Z. POC Daniel Lopez 910-440-1097. Stop Buzzer 601-558-2709.			
	A. Dickerson and W. Munn on. WCLC. -- WM			
0602	Stuck flight plan report received and vetted. -- AD			
M 0605	ZME-M-2024/05/15-0001 -- N189TK -- AD			
0611	NAS Certified. -- AD			
1052	Paul Hanna on. WCLC. -- HA			
1230	WX/TFC/EQUIP Briefing Complete. -- HA			
1408	Stuck flight plan report received and vetted. -- HA			
1447	B. Branch on. WCLC. -- BX			
1755	Brian Bittick on WCLC -- DB			
2000	WX/TFC/EQUIP Briefing Complete. -- DB			
2200	Stuck flight plan report received and vetted. -- UK			
2300	J. Quenichet on. WCLC. -- GQ			
M 0131	ZME-M-2024/05/15-0002 -- THUNDRI -- GQ			
0238	Digital Audio Legal Recorder (DALR) Checks Complete. -- RP			
0300	P. Rousseau on, WCLC. -- PZ			
0301	R. Paule and P. Bowles on. WCLC. -- RP			
M 0314	ZME-M-2024/05/15-0003 -- RPA4333 -- RP			
M 0322	ZME-M-2024/05/15-0004 -- RPA4333 -- RP			
0333	Backup channel released for chart load. -- RP			
0447	Channel promotion started. On Backup. -- RP			
0459	COB. -- BG			
I CERTIFY that entries above are correct, that all scheduled operations have been accomplished except as noted, and that all abnormal occurrences and conditions have been recorded.		SIGNATURE(S) OF WATCH SUPERVISOR(S) 		

FAA Form 7230-4

24-002-BNA
N47WT

DAILY RECORD OF FACILITY OPERATION				PAGE NO Page 1 of 1
				DATE May 15, 2024
LOCATION	IDENTIFICATION	TYPE FACILITY	OPERATING POSITION	
Nashville, TN	BNA	ATCT	Watch Desk	 William J. Harper
UTC TIME	REMARKS			
0500	P. LINAM ON, SOUTH OPERATION, LAP, WCLC, TRACON CONSOLIDATED TO TWR. CFPL: CIRCULAR WX OTS. 6 LEVEL WX WORKS IN LINEAR MODE. AOCC NTFD. GCO Line is very weak requiring the volume control to be at max adjustment. AOCC notified. HOP shout line OTS. Tech Ops notified and AOCC notified. ASR WEATHER INTERMITTENT. RUNWAY 2L/20R CLOSED. ILS'S OTS. FREQ. 121.7 STDBY TX AND RX OTS. AOCC NOTIFIED. 119.35 MAIN TX OTS. STANDBY WEAK. AOCC NTFD. GC KEYBOARD OTS. AOCC NOTIFIED. HOP SHOUT LINE HAS A LOUD TONE THAT COMES OUT FROM SPEAKERS UNLESS THE LINE IS LISTENED TO AT SOME ETVS. AOCC NOTIFIED. GC STARS KEYBOARD INOPERABLE. AOCC NOTIFICATION INITIALS: SAM -- LM			
0745	Z. HEDRICK ON, ABV NOTED. -- LS			
0932	STARS R10A UPGRADE INITIATED. STARS OFM. -- CC			
0933	STARS R10A UPGRADE COMPLETED. STARS RTS. -- CC			
1013	P. LINAM ON, ABV NOTED. TRACON OPEN. -- LM			
1155	A. FORCUM ON. -- TK			
1200	WCLC. -- TK			
1400	DAILY CONCOURSE D RFI CHECK COMPLETE. NO ISSUES NOTED. -- TK			
1652	NORTH OPS. -- TK			
M 1657	BNA-M-2024/05/15-0001 -- SWA6137 -- TK			
1702	AIRCRAFT ACCIDENT. N47WT. DEN/JSEN NOTIFIED. -- CN			
1745	J. KRAYNIK ON. -- KK			
M 2046	BNA-M-2024/05/15-0002 -- N47WT -- CN			
2100	WCLC. -- KK			
0241	B. POWERS ON. -- BP			
0307	J. LEE ON. ABV NTD. -- UT			
0455	STRAIGHT 31 OPERATION. -- UT			
0459	COB. -- UT			
I CERTIFY that entries above are correct, that all scheduled operations have been accomplished except as noted, and that all abnormal occurrences and conditions have been recorded.		SIGNATURE(S) OF WATCH SUPERVISOR(S) 		

FAA Form 7230-4

24-002-BNA
AIR TRAFFIC CONTROL
ATIS UNIT 5

ERA24FA217
Page 396 of 471

SECTION 5.
Personnel Log(s)

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 1			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
MILLER, MATTHEW (MM) 06:00 - 14:00	9	05:35	06:00	07+40	01+30	Leave	02+33	03+38				
	R	06:00	08:15									
	R	09:45	14:00									
	9	14:00	14:45									
JONES, ADAM (KJ) 05:45 - 13:45	R	05:45	12:45	07+00	01+00	Leave	00+08	03+52				
NELSON, STEPHEN (SE) 05:45 - 13:45	R	05:45	13:45	08+00			00+28	04+47				
RAWLS, CHAD (CR) 05:45 - 13:45	R	05:45	13:45	08+00			02+25	03+15				
WRIGHT, AARON (AW) 05:45 - 13:45	R	05:45	13:45	08+00			00+42	05+27				
KALLAHER, JOHN (JK) 06:30 - 14:30	9	06:15	06:30	08+15			02+15	03+45				
	R	06:30	14:30									
CRIST, SHEA (RC) 06:30 - 14:30	R	06:30	14:30	08+00			07+37	00+00				
EVANS, JAMES (JE) 06:30 - 15:00	R	06:30	15:00	08+30			00+00	00+00				
JONES, KEVIN (EV) 06:30 - 15:00	R	06:30	15:00	08+30			00+00	00+00				
LEE, HUNTER (OP) 06:30 - 14:30	R	06:30	14:30	08+00			02+28	04+42				
LUFKIN, CRYSTAL (LC) 06:30 - 14:30	R	06:30	14:30	08+00			05+05	01+41				
PATTERSON, KEVIN (KV) 06:30 - 14:30	R	06:30	14:30	10+00			02+29	05+02				
	51	14:30	16:30									
BORING, JAMES (OB) 06:35 - 14:35	R	06:35	14:35	08+00			00+38	05+25				
MCNEIL, JESSIE (TS) 06:35 - 14:35	R	06:35	14:35	08+00			01+57	02+59				
WOODARD, CLINTON (MP) 06:39 - 14:39	R	06:39	14:39	08+00			04+01	02+29				
SQUIRES, ADRIENNE (AP) 06:40 - 14:40	R	06:40	14:40	08+00			00+46	04+29				
BRUNO, ELIZABETH (LZ) 06:52 - 14:52	R	06:52	14:52	10+00			03+28	04+46				
	51	14:52	16:52									
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 1			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
ARNOLD, JASON (AC) 07:00 - 15:00	R	07:00	15:00	08+00			08+00	00+00				
STEPHENSON, CHRISTOPHER (SS) 08:00 - 16:00	R	08:00	16:00	08+00			08+00	00+00				
RUTTER, JENNIFER (JY) 11:30 - 19:30	9	10:40	11:30	08+50			00+29	06+01				
	R	11:30	19:30									
GILBERT, ALLISON (VV) 13:00 - 21:00	R	13:00	21:00	08+00			02+17	03+12				
KEELING, PAUL (PR) 13:00 - 21:00	R	13:00	21:00	08+00			00+49	05+35				
ALDRED, MATTHEW (MC) 13:15 - 21:15	R	13:15	21:15	08+00			00+48	04+23				
ROUSSEAU, PATRICK (PZ) 13:45 - 21:45	9	13:30	13:45	08+45			00+08	07+52				
	R	13:45	21:45									
	99	21:45	22:15									
HIBBS, CHRISTOPHER (HC) 14:20 - 22:20	R	14:20	22:20	08+00			00+35	03+23				
HYTE, SPENCER (LO) 14:20 - 22:20	R	14:20	22:20	08+00			00+36	04+31				
STITT, TAYLOR (TC) 14:20 - 22:20	R	14:20	22:20	08+00			00+35	05+03				
JONES, ADAM (KJ) 22:10 - 06:10	9	21:45	22:10	08+25			00+08	04+48				
	R	22:10	06:10									
WRIGHT, AARON (AW) 22:10 - 06:10	9	21:45	22:10	08+25			02+48	04+30				
	R	22:10	06:10									
NELSON, STEPHEN (SE) 22:10 - 06:10	R	22:10	06:10	08+00			00+07	04+18				
RAWLS, CHAD (CR) 22:10 - 06:10	R	22:10	06:10	08+00			00+08	03+44				
PHILLIPS, MONIQUE (YV) 06:00 - 14:00					08+00	Leave	00+00	00+00				
RICH, THOMAS (RT) 06:00 - 14:00					08+00	Leave	00+00	00+00				
STEELE, FREDERICK (FT) 07:00 - 15:00					08+00	Leave	08+00	00+00				
BRUNS, ADAM (AJ) 07:00 - 15:00					08+00	Leave	00+00	00+00				
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 1			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
BAGLEY, SEAN (NP) 07:00 - 15:00					08+00	Leave	00+00	00+00				
MAZUR, MADELYN (IK) 07:00 - 15:00					08+00	Leave	00+00	00+00				
JACKIN, BRYCE (FX) 07:00 - 15:00					08+00	Leave	00+00	00+00				
GARRISON, CARTER (CG) 13:30 - 21:30					08+00	Leave	00+00	00+00				
GABRIEL, JEFFREY (VE) 13:30 - 21:30					08+00	Leave	00+00	00+00				
HAYES, MATTHEW (MH) 14:20 - 22:20					08+00	Leave	00+00	00+00				
MCDUGALL, MAXWELL (MX) RDO	51	13:15	21:15	08+00			00+06	06+00				
BLACK, BENJAMIN (GA) RDO	67	14:20	22:20	08+00			00+29	05+23				
FLAVIN, SHANNON (SF) RDO	280	14:20	21:40	07+20			00+23	04+14				
BAKER, JAMAAL (BA) NAS												
GODFREY, ANDREW (PU) NAS												
LANCASTER, TAKEYIAH (KK) NAS												
MARTIN, MICHAEL (MQ) NAS												
AYALA SMITH, DEREK (AY) RDO												
BOETTGER, JOSEPH (BO) RDO												
DAYTON, STEVEN (SA) RDO												
HUFFMAN, JESSICA (DC) RDO												
KUTLER, KYLE (LA) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 1			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
SAMSA, KAITLYNNE (KH) RDO												
SCHIANO DI COLA, DOMENICO (CU) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 2			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
TRACEY, MICHAEL (XM) 05:45 - 13:45	R	05:45	13:45	08+00			01+06	05+55				
WATSON, KELLIE (KW) 05:45 - 13:45	R	05:45	13:45	08+00			00+54	04+21				
ALVES, BRANDON (BD) 05:48 - 13:48	R	05:48	13:48	08+00			00+24	05+10				
JONES, CHRISTOPHER (KC) 06:00 - 14:00	R	06:00	14:00	08+00			02+18	04+36				
SEGAL, WILLIAM (WS) 06:00 - 15:30	R	06:00	15:30	09+30			00+00	00+00				
EDWARDS, MATTHEW (ES) 06:30 - 14:30	R	06:30	14:30	08+00			02+04	04+21				
HUSK, ZAKERY (HZ) 06:30 - 14:30	R	06:30	14:30	08+00			00+55	04+16				
O'DANIEL, WILLIAM (OD) 06:30 - 14:30	R	06:30	14:30	08+00			02+12	02+13				
OLIVENCIA, DEJAH (DO) 06:30 - 14:30	R	06:30	14:30	08+00			02+23	03+32				
SUTER, DENNIS (DJ) 06:30 - 14:30	R	06:30	12:45	06+15	01+45	Leave	00+16	02+46				
FLIPPO, LAURA (LF) 06:34 - 14:34	R	06:34	14:34	08+00			01+18	02+54				
JONES, CORBIN (CE) 06:35 - 14:35	R	06:35	14:35	08+00			01+59	04+58				
MITCHELL, STEPHEN (II) 06:37 - 14:37	R	06:37	14:37	08+00			02+11	04+03				
DOSS, WILLIAM (YT) 06:45 - 14:45	R	06:45	14:45	08+00			02+00	04+11				
HENSON, ZACHARY (ZH) 06:45 - 14:45	R	06:45	14:45	08+00			02+19	04+03				
JESTER, CHRISTIAN (CW) 06:51 - 14:51	R	06:51	14:51	08+00			07+56	00+00				
DONAHUE, JULIANNA (RS) 07:00 - 15:00	R	07:00	15:00	08+00			00+00	00+00				
LITTLETON, STEPHEN (HM) 07:00 - 15:00	R	07:00	15:00	08+00			02+22	04+06				
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 2			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
PERDUE, CHRISTOPHER (PE) 07:00 - 15:00	R	07:00	15:00	08+00			00+00	00+00				
WORLEY, MATTHEW (WO) 10:00 - 18:00	9	09:30	10:00	08+30			08+30	00+00				
	R	10:00	18:00									
WEBB, MICHAEL (VP) 11:30 - 19:30	9	10:25	11:30	09+05			01+31	03+32				
	R	11:30	19:30									
SPARKS, KIRA (ZK) 11:30 - 19:30	9	11:15	11:30	06+45	01+30	Leave	00+38	04+08				
	R	11:30	18:00									
INMAN, JIMMY (JI) 13:20 - 21:20	9	11:25	13:20	08+55	01+00	Leave	01+15	05+21				
	R	13:20	20:20									
BROWN, JR., ERIC (EC) 13:45 - 21:45	9	12:30	13:45	09+15			03+55	05+17				
	R	13:45	21:45									
STEWARTSON, JEFFREY (JS) 14:20 - 22:20	9	13:00	14:20	09+20			00+56	04+21				
	R	14:20	22:20									
FAIR, JUSTIN (FA) 13:20 - 21:20	R	13:20	20:20	07+00	01+00	Leave	00+32	03+29				
MADLOM, TYLER (TT) 13:20 - 21:20	R	13:20	21:20	08+00			01+33	04+48				
THOMPSON, ROBERT (RO) 13:20 - 21:20	R	13:20	21:20	08+00			01+39	03+10				
GUTIERREZ, ANTONIA (GZ) 14:20 - 22:20	9	13:30	14:20	07+50	01+00	Leave	00+32	03+48				
	R	14:20	21:20									
HACK, COLBY (CZ) 14:20 - 22:20	R	14:20	22:20	08+00			00+29	05+45				
KUHNS, BRENDEN (BK) 14:20 - 22:20	R	14:20	22:20	08+00			00+42	04+07				
MIGIRDITCH, GREGORY (ER) 14:20 - 22:20	R	14:20	22:20	08+00			00+51	04+12				
PHILLIPS, EDWARD (ED) 14:20 - 22:20	R	14:20	22:20	08+00			00+47	03+36				
WATSON, KELLIE (KW) 22:10 - 06:10	9	21:50	22:10	08+20			00+16	04+20				
	R	22:10	06:10									
DESHAZO, WILLIAM (WD) 22:10 - 06:10	R	22:10	06:10	08+00			00+08	03+59				
RHOADES, NATHAN (NE) 22:10 - 06:10	R	22:10	06:10	08+00			00+21	03+58				
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS

THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT
 (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 2			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
TRACEY, MICHAEL (XM) 22:10 - 06:10	R	22:10	06:10	08+00			00+21	04+21				
BURRINGTON, CURT (CL) 07:00 - 15:00					08+00	Leave	08+00	00+00				
CURTIN, DANIEL (XD) 12:00 - 20:00					08+00	Leave	00+00	00+00				
MCNEELAN, BRYANT (PM) 13:30 - 21:30					08+00	Leave	00+00	00+00				
DICKERSON, ADAM (AD) NAS	9	06:00	06:20	00+20			00+00	00+00				
MEDER, ZACHARY (ZM) RDO	63	05:45	13:45	08+00			00+29	04+31				
GOODWIN, KATHERINE (KT) NAS												
JAMES, ADAM (AK) NAS												
GALLAGHER, JAMES (PB) RDO												
JOHNSEN, AMANDA (JJ) RDO												
KENNEDY, MATTHEW (OX) RDO												
LEWIS, JAMIESON (JX) RDO												
MCCABE, DUSTIN (IA) RDO												
MCDANIEL, TIMOTHY (TD) RDO												
MILLER, JOSEPH (JC) RDO												
ORTON, AUSTIN (AS) RDO												
PARSONS, TYLER (TP) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		

THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT
(Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 3			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
COUCH, ADAM (EX) 05:45 - 13:45	R	05:45	13:45	08+00			00+55	03+30				
RENDON, JOEY (VM) 05:45 - 13:45	R	05:45	13:45	08+00			00+38	03+33				
SENDELBACH, JEFFREY (SJ) 05:45 - 13:45	R	05:45	13:45	08+00			01+31	05+00				
CATO, MARVIN (CO) 06:00 - 14:00	R	06:00	14:00	08+00			00+36	04+54				
DUFFIE, CHRISTOPHER (MS) 06:00 - 14:00	R	06:00	14:00	08+30			04+41	03+48				
	9	14:00	14:30									
KELLEY, JAMES (MK) 06:00 - 14:30	R	06:00	14:30	08+30			00+00	00+00				
SHANNON, CHRISTOPHER (SR) 06:00 - 14:00	R	06:00	14:00	08+00			01+12	03+54				
SPICER, WILLIAM (BS) 06:00 - 14:00	R	06:00	14:00	08+00			08+00	00+00				
ARWOOD, ADAM (XX) 06:30 - 14:30	R	06:30	14:30	08+00			01+17	04+57				
CURTIS, JUSTIN (BC) 06:30 - 15:00	R	06:30	15:00	08+30			00+00	00+00				
LYNCH, MATTHEW (ME) 06:30 - 14:30	R	06:30	14:30	08+00			01+14	04+23				
O'CONNOR, JOSHUA (JQ) 06:30 - 14:30	R	06:30	14:30	10+00			02+15	04+14				
	9	14:30	16:30									
RIAL, CHELSEA (DT) 06:30 - 15:00	R	06:30	15:00	08+30			00+00	00+00				
BONE, EVAN (EB) 06:35 - 14:35	R	06:35	14:35	08+00			01+58	03+11				
WRIGHT, KEVIN (KD) 06:40 - 14:40	R	06:40	14:40	08+00			02+28	03+05				
ALLEN, RESHARD (RA) 06:45 - 14:45	R	06:45	14:45	08+00			01+37	04+07				
MCVEIGH, HENRY (HI) 06:48 - 14:48	R	06:48	14:48	08+00			02+13	03+19				
SMITH, STEPHEN (SK) 07:00 - 15:00	R	07:00	15:00	08+00			00+00	00+00				
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 3			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
WARREN, TREY (KO) 07:45 - 15:45	R	07:45	14:45	07+00	01+00	Leave	00+26	04+41				
GUASP, MICHAEL (XN) 09:00 - 17:00	R	09:00	17:00	10+00			08+00	01+28				
	9	17:00	19:00									
QUENICHET, JOSEPH (GQ) 13:00 - 21:00	9	11:00	13:00	10+00			03+22	06+38				
	R	13:00	21:00									
BURGESS, JASON (IC) 11:30 - 19:30	R	11:30	19:30	08+00			02+44	02+20				
BROOKS, DAVID (EE) 07:00 - 15:00	R	12:00	15:00	03+00	05+00	Leave	00+00	00+00				
SAELINGER, JONATHAN (SL) 12:00 - 20:00	R	12:00	20:00	08+00			00+35	03+40				
NEUBAUER, STEVEN (NY) 14:20 - 22:20	9	12:20	14:20	10+00			00+48	06+09				
	R	14:20	22:20									
TORRES, ROBIN (RE) 14:20 - 22:20	9	12:30	14:20	09+50			00+42	05+01				
	R	14:20	22:20									
DAVIS, BENJAMEN (OH) 13:30 - 21:30	R	13:30	21:30	08+00			01+00	05+08				
GLENN, WILLIAM (GN) 13:30 - 21:30	R	13:30	21:30	08+00			00+27	04+30				
SOLOMON, CHARLES (PG) 13:30 - 21:30	R	13:30	21:30	08+00			00+25	04+21				
JURKOVIC, DAVID (JU) 14:20 - 22:20	R	14:20	22:20	08+00			00+37	03+40				
KNOTZ, CAMERON (CJ) 14:20 - 22:20	R	14:20	22:20	08+00			00+32	04+16				
OURS, NATHANIEL (ON) 14:20 - 22:20	R	14:20	22:20	08+00			01+00	04+54				
LOVAN, MATTHEW (ML) 13:30 - 21:30	R	14:30	21:30	07+00	01+00	Leave	00+34	03+06				
CATO, MARVIN (CO) 22:10 - 06:10	R	22:10	06:10	08+00			00+21	04+06				
RENDON, JOEY (VM) 22:10 - 06:10	R	22:10	06:10	08+00			00+21	03+59				
SENDELBACH, JEFFREY (SJ) 22:10 - 06:10	R	22:10	06:10	08+00			00+24	04+02				
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 3			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
ANDRADE, JARIEL (AQ) 06:00 - 14:00					08+00	Leave	00+00	00+00				
DOIRON, CHASE (CM) 06:30 - 14:30					08+00	Leave	00+00	00+00				
DEPEW, DANIEL (DZ) 08:00 - 16:00					08+00	Leave	00+00	00+00				
AVERY, CHRISTOPHER (AT) 13:30 - 21:30					08+00	Leave	00+00	00+00				
GRANADILLO, MIGUEL (GR) 14:20 - 22:20					08+00	Leave	00+00	00+00				
PASSMORE, MARGARET (MG) 14:20 - 22:20					08+00	Leave	00+00	00+00				
ANDRADE, JARIEL (AQ) 22:10 - 06:10					08+00	Leave	00+00	00+00				
COUCH, ADAM (EX) 22:10 - 06:10					08+00	Leave	00+00	00+00				
MUNN, WINFRED (WM) NAS	9	06:00	06:20	00+20			00+00	00+00				
SHELLY, THOMAS (WA) RDO	57	22:10	06:10	08+00			00+33	04+09				
DICKENS, WILLIAM (HD) NAS												
ELLIS, MICHAEL (PA) NAS												
NELSON, NATHANIEL (SW) NAS												
BAUMGARTEN, SAGE (EF) RDO												
KETCHMARK, CHRISTOPHER (CV) RDO												
KNEPPER, THOMAS (KN) RDO												
MANDERFELD, BRADLEY (OJ) RDO												
MANEGOLD, PHILLIP (AU) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 3			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
MORGAN, KATHRYN (KM) RDO												
MORRILL, SARA (SC) RDO												
NORTON, TYLER (BB) RDO												
SALMON, ISAAC (IS) RDO												
VALLONE, ROBERT (VR) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME			CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 4			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
AVEILLE, MICHAEL (AV) 05:45 - 13:45	R	05:45	13:45	08+00			00+32	03+11				
FIELEK, TRAVIS (GP) 05:45 - 13:45	R	05:45	11:45	06+00	02+00	Leave	01+18	03+54				
HARRIS, NICHOLAS (NH) 05:45 - 13:45	R	05:45	13:45	09+45			09+28	00+00				
	9	13:45	15:30									
PAULE, REAGEN (RP) 06:00 - 14:00	9	05:45	06:00	06+15	02+00	Leave	00+00	05+48				
	R	06:00	12:00									
TREADWAY, HAROLD (CT) 05:45 - 13:45	R	05:45	13:45	08+00			00+31	02+15				
BRANCH, BEAU (BX) 06:00 - 14:00	R	06:00	14:00	08+00			00+00	06+34				
GILL, RICK (GI) 06:30 - 14:30	R	06:30	14:30	08+00			04+16	00+54				
MCDONALD, MICHAEL (LG) 06:30 - 15:00	R	06:30	15:00	08+30			00+00	00+00				
O'CONNOR, LISA (LM) 06:30 - 14:30	R	06:30	14:30	08+00			04+01	01+04				
METTEE, JOHN (JM) 06:35 - 14:35	R	06:35	14:35	08+00			00+37	02+20				
CABRERA, JAMES (HP) 06:38 - 14:38	R	06:38	14:38	08+00			00+24	05+11				
BAHADIRLI, JEREMY (JZ) 06:40 - 14:40	R	06:40	14:40	08+00			01+13	03+43				
WHITE, ANDREW (EI) 06:45 - 14:45	R	06:45	14:45	08+00			01+57	02+53				
STALCUP, JOEL (GS) 06:48 - 14:48	R	06:48	14:48	08+00			00+32	04+15				
STEWART, SCOTT (FG) 07:00 - 15:00	R	07:00	15:00	08+00			08+00	00+00				
LUCAS, KOFI (LU) 11:30 - 19:30	R	11:30	19:30	08+00			00+29	04+47				
HUFFMAN, LAWRENCE (HF) 13:45 - 21:45	9	12:15	13:45	09+30			01+28	08+02				
	R	13:45	21:45									
BRUSTUEN, STEFAN (ST) 13:20 - 21:20	9	12:20	13:20	09+00			00+42	04+40				
	R	13:20	21:20									
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS

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PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 4			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
DETWILER, JACOB (JA) 13:20 - 21:20	R	13:20	21:20	08+00			00+53	05+08				
ASHRAF, ZEESHAN (XE) 13:23 - 21:23	R	13:23	21:23	08+00			00+24	04+26				
VAUGHN, WILLIAM (VN) 13:30 - 21:30	R	13:30	19:00	05+30	02+30	Leave	00+43	03+29				
YOUNG, JESSICA (JL) 13:30 - 21:30	R	13:30	21:30	08+00			00+40	04+00				
JOSEPH, ROSALYN (RL) 13:00 - 21:00	R	14:00	21:00	07+00	01+00	Leave	00+32	03+54				
CHAMPION, JENNIFER (CH) 14:20 - 22:20	R	14:20	19:35	05+15	02+45	Leave	00+36	03+01				
HARLOW, MICHAEL (UF) 14:20 - 22:20	R	14:20	22:20	08+00			01+02	04+38				
PRINCE, NICHOLAS (FP) 14:20 - 22:20	R	14:20	22:20	08+00			00+51	04+57				
ROBISON, WHITNEY (WR) 14:20 - 22:20	R	14:20	22:20	08+00			01+08	04+36				
WEAVER, TIMOTHY (WT) 14:20 - 22:20	R	14:20	22:20	08+00			00+51	05+29				
WILSON, TYLER (TK) 14:20 - 22:20	R	14:20	22:20	08+00			00+55	05+02				
GABRIELSON, RYAN (YN) 14:20 - 22:20	R	17:20	22:20	05+00	03+00	Leave	00+19	03+01				
AVEILLE, MICHAEL (AV) 22:10 - 06:10	9	21:45	22:10	08+25			00+16	04+22				
	R	22:10	06:10									
TREADWAY, HAROLD (CT) 22:10 - 06:10	9	21:55	22:10	08+15			00+13	04+16				
	R	22:10	06:10									
PAULE, REAGEN (RP) 22:00 - 06:00	R	22:00	06:00	08+00			00+00	07+35				
RUSSENBERGER, PAUL (PL) 22:10 - 06:10	R	22:10	06:10	08+00			00+16	03+39				
RUSSENBERGER, PAUL (PL) 06:00 - 14:00					08+00	Leave	00+00	00+00				
ELROD, DANIEL (EL) 06:30 - 14:30					08+00	Leave	00+00	00+00				
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
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PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 4			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
JONES, TAVIAN (OG) 07:00 - 15:00					08+00	Leave	00+00	00+00				
QUINLIVAN, RYAN (RQ) 07:00 - 15:00					08+00	Leave	00+00	00+00				
DICKERSON, MATTHEW (MD) 12:00 - 20:00					08+00	Leave	00+00	00+00				
MELITI, FRANK (FM) 14:20 - 22:20					08+00	Leave	00+00	00+00				
LAZARO, EZEKIEL (IQ) RDO	51	06:30	14:30	08+00			00+40	04+20				
SMITH, ALLISON (AB) RDO	50	22:10	06:10	08+00			00+16	03+49				
BAUDHUIN, JOSEPH (BN) NAS												
KUNZ, JAY (KZ) NAS												
KUNZMAN, DAVID (DX) NAS												
VANDER LINDE, NATHANIEL (NV) NAS												
DADAH, ROBERT (NK) RDO												
EURE, STEPHEN (SU) RDO												
INZETTA, ANTHONY (TZ) RDO												
JENKINS, JESSICA (FL) RDO												
JUDY, RYAN (WV) RDO												
KNOPE, DANIEL (DK) RDO												
MULARCZYK, ARTUR (BT) RDO												
STANCZAK, DANIEL (ZS) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		
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		ASO		ZME		AREA 4			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
WEEKES, CAMERON (CY) RDO												
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 5			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
LEPEARD, SEAN (EN) 05:45 - 13:45	R	05:45	13:45	08+00			00+46	04+11				
RICHINS, REGGY (RR) 05:46 - 13:46	R	05:46	13:46	08+00			00+40	04+32				
GOINS, JASON (JG) 05:50 - 13:50	R	05:50	13:50	08+00			00+59	05+06				
SMITH, ASHLEY (AN) 05:57 - 13:57	R	05:57	13:57	08+00			01+25	04+35				
REYLE, BRENT (BR) 06:00 - 14:00	R	06:00	14:00	09+00			02+54	05+25				
	9	14:00	15:00									
KENNEDY, LAYNIE (LK) 06:30 - 14:30	R	06:30	14:30	08+00			03+07	03+37				
LINDSEY, MALIK (GL) 06:30 - 14:30	R	06:30	14:30	08+00			02+00	04+36				
PATZ, BRENDAN (BV) 06:30 - 15:00	R	06:30	15:00	08+30			00+00	00+00				
RAY, DANIEL (DR) 06:30 - 14:30	R	06:30	14:30	08+00			00+49	05+40				
WEBER, TRAVIS (WK) 06:30 - 14:30	R	06:30	14:30	08+00			01+42	03+39				
LEVINS, JASON (PP) 06:35 - 14:35	R	06:35	14:35	08+00			01+35	04+39				
MCELRATH, KELLY (KG) 06:42 - 14:42	R	06:42	14:42	08+00			01+35	03+45				
DELAUGHTER, BOBBY (UM) 06:45 - 14:45	R	06:45	14:45	08+00			02+00	03+06				
HARTMAN, SEAN (AF) 06:45 - 14:45	R	06:45	14:45	08+00			01+45	03+31				
SIMPSON, STEVEN (XZ) 06:30 - 14:30	R	08:00	14:30	06+30	01+30	Leave	00+32	04+01				
LEE, RANDALL (RJ) 11:39 - 19:39	R	11:39	19:39	08+00			01+53	02+52				
ANDRES, ADAM (AA) 13:00 - 21:00	9	12:00	13:00	09+00			02+47	06+13				
	R	13:00	21:00									
CLIFTON, BRIAN (VB) 13:00 - 21:00	9	12:30	13:00	08+30			08+30	00+00				
	R	13:00	21:00									
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
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NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
TROXEL, JESSICA (QB) 14:20 - 22:20	9 R	12:50 14:20	14:20 22:20	09+30			00+42	05+15				
ADAMS, COREY (CA) 13:20 - 21:20	R	13:20	21:20	08+00			00+54	04+59				
HAGLAND, KYLE (HH) 13:20 - 21:20	R	13:20	21:20	08+00			00+54	02+42				
SAINT, JUSTIN (RI) 13:20 - 21:20	R	13:20	21:20	08+00			01+04	05+09				
TURNER, KYLE (KA) 13:20 - 21:20	R	13:20	21:20	08+00			01+04	05+09				
RHEA, MATTHEW (TN) 13:24 - 21:24	R	13:24	21:24	08+00			00+47	03+02				
MUNDAY, STEPHEN (SM) 13:30 - 21:30	R	13:30	21:30	08+00			00+53	04+59				
DEAN, MATTHEW (MB) 14:20 - 22:20	R	14:20	22:20	08+00			00+32	04+16				
GASKINS, DUSTIN (DU) 14:20 - 22:20	R	14:20	22:20	08+00			00+38	03+42				
MONTAGUE, JARED (JN) 14:20 - 22:20	R	14:20	22:20	08+00			00+39	05+18				
MORRISON, ANDREW (EH) 14:20 - 22:20	R	14:20	22:20	08+00			01+04	04+01				
SPANN, PATRICK (TM) 14:20 - 22:20	R	14:20	22:20	08+00			00+55	03+57				
GOINS, JASON (JG) 22:10 - 06:10	R	22:10	06:10	08+00			00+13	04+04				
LEPEARD, SEAN (EN) 22:10 - 06:10	R	22:10	06:10	08+00			00+08	04+28				
RICHINS, REGGY (RR) 22:10 - 06:10	R	22:10	06:10	08+00			00+05	03+43				
WILD, JENNIFER (IM) 06:00 - 14:00					08+00	Leave	00+00	00+00				
BOND, ZACHARY (TB) 14:20 - 22:20					08+00	Leave	00+00	00+00				
SMITH, ASHLEY (AN) 22:10 - 06:10					08+00	Leave	00+00	00+00				
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		
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PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 5			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
WILD, JENNIFER (IM) 22:10 - 06:10					08+00	Leave	00+00	00+00				
HENDRICKSON, BRADY (HB) NAS	9	21:29	22:09	08+40			00+07	04+22				
	51	22:10	06:10									
HOUZENGA, NATHAN (EO) NAS												
LITTLE, LAKENDRICK (LB) NAS												
MINK, JASON (DW) NAS												
TROPP, JEFFREY (JF) NAS												
BARRY, DALVIN (GB) RDO												
BUCKINGHAM, CHERI (CD) RDO												
HENNESSEY, MORGAN (MY) RDO												
JASTRZEBOWSKI, MARCIN (MJ) RDO												
MATEO, DYLAN (DM) RDO												
MAY, JASON (YY) RDO												
MILLER, KAITLIN (NJ) RDO												
NEWMAN, DEREK (IZ) RDO												
SLY, RYAN (RB) RDO												
SURRATT, DUSTIN (DS) RDO												
VERWERS, DEREK (VD) RDO												
WATSON, DAKOTA (DP) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		

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PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 6			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
JOHNSON, ERIK (EJ) 05:45 - 13:45	R	05:45	13:45	08+00			00+34	06+02				
REPP, LINDSAY (LR) 05:45 - 13:45	R	05:45	13:45	08+00			01+00	05+28				
BOWLES, PATRICK (BG) 06:00 - 14:00	9	05:50	06:00	08+10			00+00	07+19				
	R	06:00	14:00									
CAMPBELL, DESMOND (MI) 06:00 - 14:00	R	06:00	14:00	08+00			00+32	04+01				
SCHWARTZ, CHRISTOPHER (OA) 06:25 - 14:25	R	06:25	14:25	08+00			08+00	00+00				
BOWIE, JAMES (BE) 06:30 - 14:30	R	06:30	14:30	08+00			06+32	00+43				
BROWN, SAMANTHA (SI) 06:30 - 15:00	R	06:30	15:00	08+30			00+00	00+00				
CONTRERAS, DAVID (DG) 06:30 - 15:00	R	06:30	15:00	08+30			00+00	00+00				
EDOFF, JOHN (GO) 06:30 - 14:30	R	06:30	14:30	08+00			01+31	03+02				
JOHNSON, RYAN (YR) 06:30 - 14:30	R	06:30	14:30	08+00			00+32	03+48				
MARINO, ROBERT (RV) 06:30 - 14:30	R	06:30	14:30	08+00			01+12	05+09				
PINCKLEY, LAURA (LP) 06:30 - 14:30	R	06:30	11:30	05+00	03+00	Leave	00+13	02+30				
ZHANG, ANDREW (AZ) 06:30 - 14:30	R	06:30	14:30	08+00			06+48	00+19				
JOLLY, AMY (TJ) 06:35 - 14:35	R	06:35	14:35	08+00			01+02	04+38				
HELVEY, BRIAN (LV) 06:40 - 14:40	R	06:40	14:40	08+00			07+46	00+00				
PORTANOVA, KEVIN (KP) 06:50 - 14:50	R	06:50	14:50	08+00			04+12	01+44				
SOUTHERLAND, MICHAEL (SO) 06:50 - 14:50	R	06:50	14:50	08+00			00+33	03+54				
TAYLOR, SEAN (QT) 06:55 - 14:55	R	06:55	14:55	08+00			00+26	03+40				
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 6			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
GOINS, JOHNATHAN (HG) 07:00 - 15:00	R	07:00	15:00	08+00			01+12	05+09				
JENKINS, SHANNON (NN) 07:00 - 15:00	R	07:00	15:00	08+00			08+00	00+00				
NELSON, PAUL (PK) 07:00 - 15:00	R	07:00	15:00	08+00			00+25	05+17				
NELSON, JAMES (NL) 08:00 - 16:00	R	08:00	16:00	08+00			00+00	00+00				
TAYLOR, JONATHAN (JT) 06:00 - 14:00	R	09:00	14:00	05+00	03+00	Leave	00+30	01+59				
ALLEN, MARK (MT) 11:30 - 19:30	R	11:30	19:30	08+00			02+05	04+13				
HANCOCK, JOHN (CB) 11:30 - 19:30	R	11:30	19:30	08+00			02+00	03+53				
CHANG, NATHALIE (ET) 13:20 - 21:20	R	13:20	21:20	08+00			01+12	05+14				
JABR, ELIZABETH (EG) 13:20 - 21:20	R	13:20	21:20	08+00			00+28	05+16				
POTEAT, LAURIE (LS) 13:20 - 21:20	R	13:20	21:20	08+00			01+12	05+14				
WILLIAMS, WAYNE (XW) 13:30 - 21:30	R	13:30	21:30	09+00			00+32	05+12				
	51	21:30	22:30									
SKURA, BRIAN (BP) 14:20 - 22:20	9	13:35	14:20	08+45			00+52	04+47				
	R	14:20	22:20									
HOLLIE, BRANDON (BZ) 13:45 - 21:45	R	13:45	21:45	08+00			00+10	07+04				
ESPINAL, EMILY (EY) 14:20 - 22:20	R	14:20	22:20	08+00			00+49	04+51				
GERALD, ADAM (AR) 14:20 - 22:20	R	14:20	22:20	08+00			00+32	04+02				
KING, DANIEL (DA) 22:10 - 06:10	9	21:45	22:10	08+25			00+16	04+08				
	R	22:10	06:10									
BOWLES, PATRICK (BG) 22:00 - 06:00	R	22:00	06:00	08+00			00+00	07+35				
CAMPBELL, DESMOND (MI) 22:10 - 06:10	9	22:00	22:10	08+10			00+05	04+03				
	R	22:10	06:10									
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		AREA 6			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
JOHNSON, ERIK (EJ) 22:10 - 06:10	R	22:10	06:10	08+00			00+08	03+47				
BURNS, STEVEN (SB) 07:00 - 15:00					08+00	Leave	00+00	00+00				
HAYNES, JONATHAN (ZJ) 08:00 - 16:00					08+00	Leave	00+00	00+00				
PETERSON, JR., RONNIE (PN) 10:00 - 18:00					08+00	Leave	00+00	00+00				
DIXON, AARON (NX) 14:20 - 22:20					08+00	Leave	00+00	00+00				
GIACOMINI, CONNOR (EZ) 14:20 - 22:20					08+00	Leave	00+00	00+00				
TROSPER, EZEKIEL (TR) 14:20 - 22:20					08+00	Leave	00+00	00+00				
MORELAND, ZECHARIAH (YS) RDO	65	06:30	14:30	08+00			00+35	03+45				
HALLIBURTON, SHAYLYNN (HR) RDO	9 54	13:20 14:20	14:20 22:20	09+00			00+39	04+31				
KEITH, JOSHUA (TX) RDO	50	13:30	21:30	08+00			00+35	04+11				
COUGHLIN, TIMOTHY (TI) RDO	50	22:10	06:10	08+00			00+16	03+51				
HALL, ADAM (VO) NAS												
RHODES, RICHARD (RW) NAS												
BAARSCH, JAMES (JB) RDO												
HASLEY, EVAN (UU) RDO												
JIMENEZ, NICHOLAS (GG) RDO												
JOHNSON, JOSIAH (JD) RDO												
MCCARTY, LOGAN (LN) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		SYS OPS			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
BOWDEN, SHARONDA (SY) 05:00 - 13:00	R	05:00	13:00	08+30			01+28	04+19				
	9	13:00	13:30									
JOHNSON, DAVID (GJ) 05:00 - 13:00	R	05:00	13:00	08+00			00+00	05+04				
WERTZ, BRACKEN (WZ) 06:00 - 14:00	9	05:40	06:00	08+20			05+45	02+22				
	R	06:00	14:00									
WEYMERS, TIMOTHY (TW) 06:37 - 14:37	R	06:37	14:37	08+00			00+00	03+24				
JAMES, PEEPSIE (PY) 07:00 - 15:30	R	07:00	15:30	10+00			00+00	00+00				
	1	15:30	17:00									
MCCLOSKEY, JONATHAN (AL) 11:50 - 19:50	R	11:50	19:50	08+00			00+00	04+40				
MCCLOSKEY, JONATHAN (AL) 11:50 - 19:50	R	11:50	19:50	08+00			00+00	04+40				
KINSLER, HENRY (HK) 13:00 - 21:00	R	13:00	21:00	08+00			00+00	05+33				
KERR, JAMES (KX) 14:55 - 22:55	R	14:55	22:55	08+00			00+00	04+51				
JABR, RANI (RN) 16:44 - 00:44	R	16:44	00:44	08+00			00+00	07+32				
ROUSSEAU, NICHOLAS (ZR) 16:45 - 00:45	R	16:45	00:45	08+00			00+00	07+32				
MAY, AMANDA (AG) 06:00 - 14:00					08+00	Leave	00+00	00+00				
DIRKS, JENNA (NA) 06:00 - 14:00					08+00	Leave	00+00	00+00				
BRACKENS, WILLIAM (BY) 06:00 - 14:30					08+30	Leave	00+00	00+00				
HORNER, RICHARD (RD) 06:00 - 14:30					08+30	Leave	00+00	00+00				
CANNON, JEREMIE (OW) 14:00 - 22:00					08+00	Leave	00+00	00+00				
PEETE, JALEESA (JW) RDO	50	13:00	21:00	08+00			00+00	04+56				
EILAND, SHERMAN (SN) RDO												
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		SYS OPS			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
FRAZIER, ETHAN (FE) RDO												
RANKIN, TESSA (JO) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		OM			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
HANNA, PAUL (HA) 06:00 - 14:00	1	05:35	06:00	06+25	02+00	Leave	01+51	03+56				
	R	06:00	12:00									
WILLIAMS, STEVEN (SX) 06:45 - 15:15	R	06:45	15:15	08+30			00+00	00+00				
BITTICK, BRIAN (DB) 09:45 - 17:45	R	09:45	17:45	08+15			03+10	05+05				
	1	17:45	18:00									
HOUSE, JOSEPH (UK) 10:00 - 18:00	R	10:00	18:00	08+00			08+00	00+00				
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		ZME		FDCS			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
INGRAM, REGINALD (RM) 05:30 - 13:30	R	05:30	13:30	08+00			00+00	04+35				
ROSS, ALAN (OM) 07:15 - 15:15	9	07:00	07:15	08+15			02+42	02+11				
	R	07:15	15:15									
SMITH, JEREME (SG) 11:30 - 19:30	R	11:30	19:30	08+00			00+00	04+16				
YARBROUGH, ANDREW (YK) 14:15 - 22:15	R	14:15	22:15	08+00			00+00	05+14				
INGRAM, REGINALD (RM) 22:00 - 06:00	R	22:00	06:00	08+00			00+00	07+33				
SEURATTAN, VERA (VS) 14:15 - 22:15					08+00	Leave	00+00	00+00				
FULLER, DEXTER (DF) NAS												
EBERHART, MARK (EM) RDO												
YATES, DAVID (DY) RDO												
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

Form 7230-4 (Dec 08)

Official Version

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PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		BNA		OPERATIONS			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
CHAPPELL, KENNETH (CL) 05:30 - 13:30	R	05:30	12:45	07+15	00+45	Leave	00+33	05+30				
LEE, JEREMIAH (UT) 05:30 - 13:30	R	05:30	13:30	08+00			08+00	00+00				
MITCHELL, WILLIAM (WM) 05:30 - 13:30	R	05:30	13:30	08+00			00+21	05+26				
WORTHINGTON, WESLEY (MU) 05:30 - 13:30	R	05:30	11:30	06+00	02+00	Leave	03+32	02+30				
FORCUM, ANTHONY (TK) 05:45 - 13:45	R	05:45	13:45	08+00			01+03	04+55				
BRANDFAST, DANIEL (TN) 06:45 - 14:45	9	06:30	06:45	03+15	05+00	Leave	00+15	02+02				
	R	06:45	09:45									
FAGERLUND, BALDER (BR) 06:45 - 14:45	9	06:43	06:45	08+02			00+39	05+44				
	R	06:45	14:45									
CAPTAIN, NICHOLAS (II) 06:45 - 14:45	R	06:45	14:45	08+00			01+01	05+12				
GROHER, KEVIN (KG) 06:45 - 14:45	R	06:45	14:45	08+00			00+36	05+17				
GRUBBS, JESSE (CJ) 06:45 - 14:45	R	06:45	14:45	08+00			01+01	05+25				
HINES, JONATHAN (HN) 06:45 - 14:45	R	06:45	14:45	10+00			00+45	06+43				
	51	14:45	16:45									
MCCANTS, KEVIN (KJ) 07:00 - 15:00	R	07:00	10:30	03+30	04+30	Leave	03+14	00+00				
GRAVES, GARLD (OG) 07:00 - 15:00	R	07:15	15:00	07+45	00+15	Leave	07+37	00+00				
ROMAKER, JAIME (JR) 07:15 - 15:15	R	07:15	15:15	08+00			00+58	04+53				
SNOW, BRYAN (BT) 07:15 - 15:15	R	07:15	15:15	08+00			07+59	00+00				
WECKLER, SHELLEY (LE) 07:15 - 15:45	R	07:15	15:45	08+30			08+30	00+00				
WATERS, MARION (MW) 07:55 - 15:55	R	07:55	15:55	10+00			00+36	07+16				
	99	15:55	17:55									
ROBERTS, ANDREW (AR) 08:00 - 16:00	R	08:00	16:00	09+15			08+00	00+00				
		16:00	17:15									
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

Form 7230-4 (Dec 08)

Official Version

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24-002-BNA

N47WT
AIR TRAFFIC CONTROL
ATTACHMENT 5

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ERA24FA217
Page 423 of 471

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		BNA		OPERATIONS			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
ROUTZAHN, ROBERT (RJ) 12:30 - 20:30	9	12:15	12:30	08+15			01+23	04+47				
	R	12:30	20:30									
BONILLA, AMY (AB) 12:30 - 20:30	R	12:30	20:30	08+00			01+03	04+44				
ELLIOTTE, BRIAN (EE) 12:30 - 20:30	R	12:30	20:30	08+00			01+09	04+35				
KRAYNIK, JONATHON (KK) 13:00 - 21:00	99	12:30	13:00	09+30			00+12	08+12				
	R	13:00	21:00									
	99	21:00	22:00									
THOMPSON, DARRIUS (DT) 12:30 - 20:30	R	12:30	20:30	08+00			00+31	04+42				
GOLDSBY, DANIEL (DX) 14:30 - 22:30	9	14:22	14:30	08+08			00+25	05+35				
	R	14:30	22:30									
BRADER, STEVEN (BB) 14:30 - 22:30	R	14:30	22:30	08+00			00+20	05+22				
LEACH, MATTHEW (CB) 14:30 - 22:30	R	14:30	22:30	08+00			00+26	05+33				
POWERS, BRADLEY (BP) 14:30 - 22:30	R	14:30	22:30	08+00			00+26	05+27				
CHAPPELL, KENNETH (CL) 22:00 - 06:00	9	21:45	22:00	08+15			00+09	05+01				
	R	22:00	06:00									
LEE, JEREMIAH (UT) 22:00 - 06:00	R	22:00	06:00	08+00			00+09	04+57				
KLESSER, ANTHONY (KL) 07:00 - 15:00					08+00	Leave	00+00	00+00				
GRIMES, JONATHAN (HB) 07:00 - 15:30					08+30	Leave	00+00	00+00				
LOPEZ, JOHN (JP) 12:30 - 20:30					08+00	Leave	00+00	00+00				
HORTON, TREVOR (TH) 12:30 - 20:30					08+00	Leave	00+00	00+00				
KUBICEK, JOSEPH (XY) 14:30 - 22:30					08+00	Leave	00+00	00+00				
ALLYN, CRIS (CA) RDO	57	05:30	13:30	08+00			00+33	04+21				
GLEAVES, NICHOLAS (NG) RDO	57	05:30	13:30	08+00			00+30	05+12				
SUPERVISORY CERTIFICATE	NAME		CODE	TIME ON	TIME OFF	INTLS	NAME		CODE	TIME ON	TIME OFF	INTLS
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

PERSONNEL LOG		REGION		FACILITY		AREA ID			DATE			
		ASO		BNA		OPERATIONS			MONTH: MAY	DAY: 15	YEAR: 2024	
NAME	CODE	TIME ON	TIME OFF	HOURS ON DUTY	HOURS ON LEAVE	LEAVE TYPE	HOURS NON POSITION DUTIES ASGNDE	HOURS POSITION DUTIES ASGNDE	REMARKS FOR: ALL ABSENCES FROM FACILITY, TRNG, TDY AND NON POSITIONAL DUTIES			
KENDELL, JESSE (JJ) RDO	50	12:30	20:30	08+00			00+30	04+49				
KRAYNIK, JONATHON (KK) RDO	99	12:30	13:00	01+30			00+12	00+56				
	99	21:00	22:00									
HEDRICK, ZACHARY (LS) NAS												
KENDALL, JONATHAN (DK) NAS												
LINAM, PAUL (LM) NAS												
BESS, GEORGE (WB) RDO												
CURLESS, JACOB (JT) RDO												
KLOSE, NICHOLAS (NK) RDO												
LETART, ERIC (EL) RDO												
UPCHURCH, JULIAN (JU) RDO												
WECKLER, SCOTT (SW) RDO												
WINSINGER, DAVID (DR) RDO												
SUPERVISORY CERTIFICATE	NAME	CODE	TIME ON	TIME OFF	INTLS	NAME	CODE	TIME ON	TIME OFF	INTLS		
THE SIGNATURES ABOVE CERTIFY THAT THE ABOVE ENTRIES ARE CORRECT (Signatures and times in charge are noted on FAA Form 7230-4, Daily Record of Facility Operation)												

SECTION 6.

FAA Form(s) 7230-10, Position Log, or automated equivalent

POSITION LOG					
(1) FACILITY ID	(2) POSITION IDENTIFIER	(3) POS	(4) DATE		
ZME	R65	R	05/15/2024		
(5) TIME ON	(6) INITIALS	(7) TIME OFF	(8) CODE	WHERE COMBINED	
				(9) POSITION IDENTIFIER	(10) POSITION TYPE
0500	NV	0534	C		
0535		0539		R43	R
0540		0636		R66	R
0637	NV	0639	C		
0640		0641		40SC	O
0642		0647		R43	R
0648	NV	0730	C		
0731	DX	1045	C		
1046	GP	1114	C		
1115	AV	1136	C		
1137	IQ	1226	C		
1227	GP	1355	C		
1227	JZ	1355	T		
1356	GS	1437	C		
CODE: C - ATCS/ATA S - Supervisor/Staff Spec T - Trainee/Developmental M - Trainee/Developmental Monitoring R - Trainee/Developmental Certification/ Evaluation					

FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Electronic Version (OmniForm)

FOR OFFICIAL USE ONLY Public Availability to be determined under 5 U.S.C. 552

POSITION LOG					
(1) FACILITY ID	(2) POSITION IDENTIFIER	(3) POS	(4) DATE		
ZME	R65	R	05/15/2024		
(5) TIME ON	(6) INITIALS	(7) TIME OFF	(8) CODE	WHERE COMBINED	
				(9) POSITION IDENTIFIER	(10) POSITION TYPE
1438	GP	1606	C		
1438	JZ	1606	T		
1607	GI	1650	C		
1651	JM	1737	C		
1738	IQ	1833	C		
1834	JL	1931	C		
1932	CH	2056	C		
1932	TK	2056	T		
2057	RL	2141	C		
2142	CH	2317	C		
2142	TK	2317	T		
2318	ST	2359	C		
0000	RL	0125	C		
0126	FP	0236	C		
CODE: C - ATCS/ATA S - Supervisor/Staff Spec T - Trainee/Developmental M - Trainee/Developmental Monitoring R - Trainee/Developmental Certification/ Evaluation					

FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Electronic Version (OmniForm)
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FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Electronic Version (OmniForm)

FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Electronic Version (OmniForm)
FOR OFFICIAL USE ONLY Public Availability to be determined under 5 U.S.C. 552

POSITION LOG					
(1) FACILITY ID	(2) POSITION IDENTIFIER	(3) POS	(4) DATE		
ZME	R14	R	05/15/2024		
(5) TIME ON	(6) INITIALS	(7) TIME OFF	(8) CODE	WHERE COMBINED	
				(9) POSITION IDENTIFIER	(10) POSITION TYPE
2244	ET	2343	T		
2244	LS	2343	C		
2344	AR	0011	C		
0012	BZ	0032	S		
0033	ET	0149	T		
0033	LS	0149	C		
0150	XW	0229	C		
0230	XW	0259	C		
0300	MI	0309	C		
0310	MI	0459	C		

CODE:

C - ATCS/ATA

S - Supervisor/Staff Spec

T - Trainee/Developmental

M - Trainee/Developmental Monitoring

R - Trainee/Developmental Certification/ Evaluation

POSITION LOG					
(1) FACILITY ID	(2) POSITION IDENTIFIER	(3) POS	(4) DATE		
ZME	D14	RA	05/15/2024		
(5) TIME ON	(6) INITIALS	(7) TIME OFF	(8) CODE	WHERE COMBINED	
				(9) POSITION IDENTIFIER	(10) POSITION TYPE
0500		1140		R14	R
1141	TJ	1207	C		
1208	MI	1240	C		
1208	SO	1240	T		
1241		1351		R14	R
1352	LP	1404	C		
1405		1441		R14	R
1442	PK	1512	C		
1513		1645		R14	R
1646	PK	1811	C		
1812		2216		R14	R
2217	BP	2321	C		
2217	EY	2321	T		
2322		0022		R14	R
CODE: C - ATCS/ATA S - Supervisor/Staff Spec T - Trainee/Developmental M - Trainee/Developmental Monitoring R - Trainee/Developmental Certification/ Evaluation					

FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Electronic Version (OmniForm)

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POSITION LOG

[illegible]

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FOR OFFICIAL USE ONLY Public Availability to be determined under 5 U.S.C. 552

FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Electronic Version (OmniForm)
FOR OFFICIAL USE ONLY Public Availability to be determined under 5 U.S.C. 552

POSITION LOG					
(1) FACILITY ID	(2) POSITION IDENTIFIER	(3) POS	(4) DATE		
ZME	WSIC	0	05/15/2024		
(5) TIME ON	(6) INITIALS	(7) TIME OFF	(8) CODE	WHERE COMBINED	
				(9) POSITION IDENTIFIER	(10) POSITION TYPE
0500	AD	1051	S		
1052		2259		WS	0
2300	GQ	0159	S		
0200	PZ	0244	S		
0245	PZ	0259	S		
0300	BG	0459	S		

CODE:

C - ATCS/ATA
S - Supervisor/Staff Spec
T - Trainee/Developmental
M - Trainee/Developmental Monitoring
R - Trainee/Developmental Certification/
Evaluation

FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Electronic Version (OmniForm)

FOR OFFICIAL USE ONLY Public Availability to be determined under 5 U.S.C. 552

POSITION LOG

(1) FACILITY ID	(2) POSITION IDENTIFIER	(3) POS	(4) DATE		
ZME	S3	F	05/15/2024		
(5) TIME ON	(6) INITIALS	(7) TIME OFF	(8) CODE	WHERE COMBINED	
				(9) POSITION IDENTIFIER	(10) POSITION TYPE
0500	DF	1043	C		
1044	RM	1229	C		
1230	OM	1326	C		
1327	RM	1429	C		
1430	OM	1529	C		
1530	RM	1627	C		
1628	OM	1641	C		
1642	SG	1727	C		
1728	RM	1815	C		
1816	SG	1915	C		
1916	YK	2014	C		
2015	SG	2113	C		
2114	YK	2213	C		
2214	SG	2314	C		

CODE:

C - ATCS/ATA

S - Supervisor/Staff Spec

T - Trainee/Developmental

M - Trainee/Developmental Monitoring

R - Trainee/Developmental Certification/
Evaluation

FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Electronic Version (OmniForm)

FOR OFFICIAL USE ONLY Public Availability to be determined under 5 U.S.C. 552

FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Electronic Version (OmniForm)

FOR OFFICIAL USE ONLY Public Availability to be determined under 5 U.S.C. 552

POSITION LOG

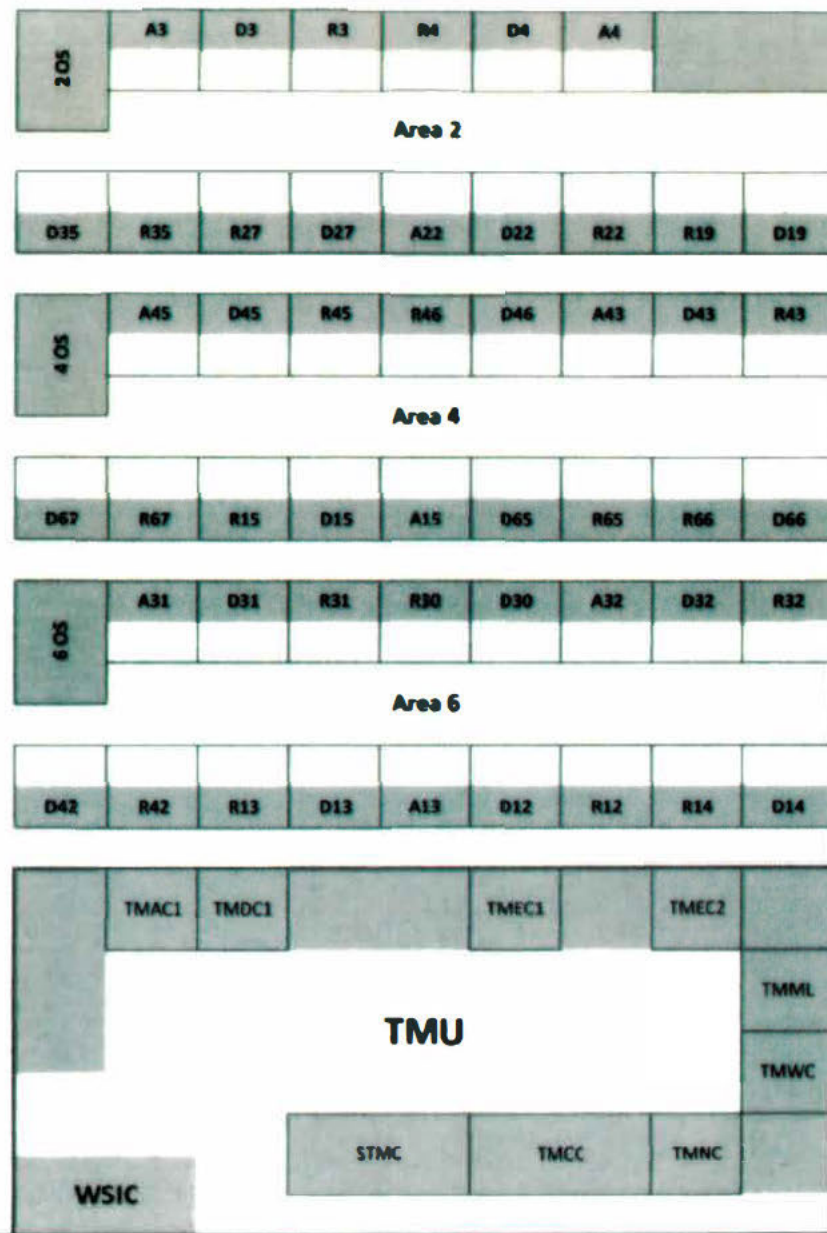
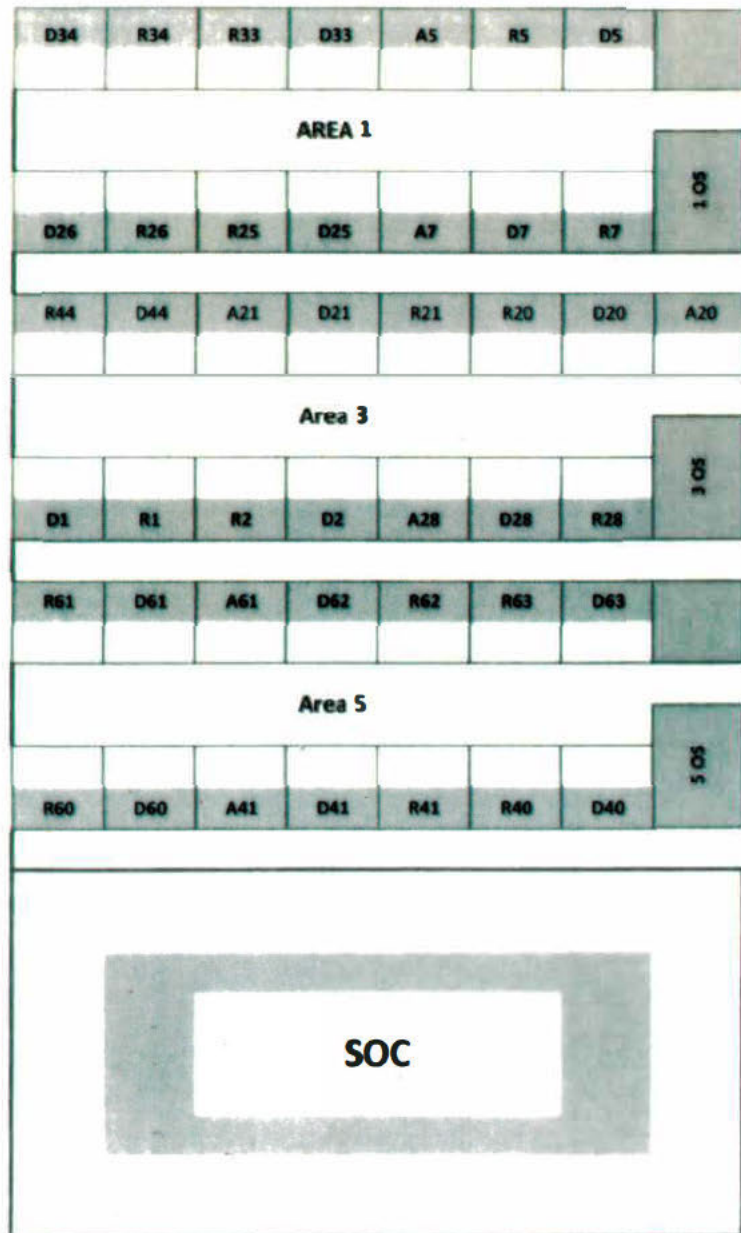
Fac ID:	BNA	Log Date:	5/15/2024
Pos ID:	DRW	Pos Type:	DR

[illegible]

FAA Form 7230-10 (Electronic)

[illegible]

SECTION 7.
Facility Layout Chart(s)



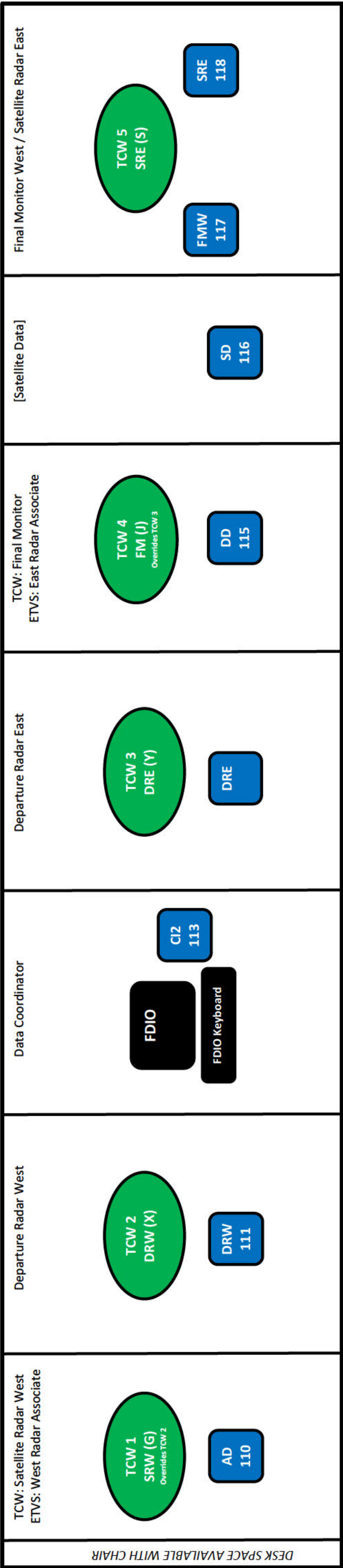
Memphis ARTCC DSR Control Position Diagram updated June 11, 2015

OVERHEAD CONSOLE

Radar Coordinator

CI1
112

DEPARTURE/WEST WALL



WATCH DESK

TRACON Supervisor

SI
127

SRW
126

TRACON ISLAND

[Satellite Radar West]

NASHVILLE (BNA)

TRACON

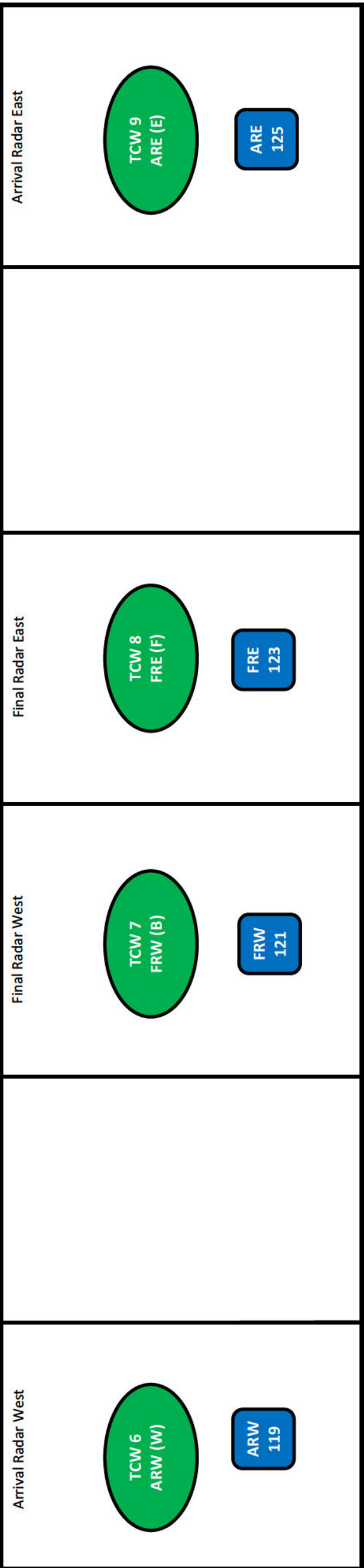
Position Layout

OVERHEAD CONSOLE

Final Monitor East

FME
122

ARRIVAL/EAST WALL



Equipment
Legend



SECTION 8.

Flight Progress Strip(s) and/or In-Flight Contact Record(s)

FPS Memphis ARTCC May 15, 2024 UTC

N47WT	MCB Ø27 Ø23 1439	38 14	70		KREG MCB EWO ANDYE IIU KLOU	2712
BE35/G T170 G165 66						
744 03/1		MHZ 177/048				
N47WT	MHZ 177 Ø48 1438	42 14	70	MHZ 157 Ø33 1446	KREG MCB EWO ANDYE IIU KLOU	2712
BE35/G T170 G165 65						
744 04/1		MEI 234/067				JJ+ JAN
N47WT	MHZ 157 Ø33 1448	Ø6 15	70	IGB 230 Ø28 1520	KREG MCB EWO ANDYE IIU KLOU	2712
BE35/G T170 G165 65						
744 05/1		MEI 295/032				CC+ CBM
N47WT	CBM 233 Ø25 1532	Ø9 16	70		KREG MCB EWO./KLOU	2712
BE35/G T170 G167 13						
744 06/1		MSL 305/017				
N47WT	MSL 305 Ø17 1626	30 16	70	BNA 224 Ø33 1648	KREG MCB EWO ANDYE IIU KLOU	2712
BE35/G T170 G166 42						
744 07/1		MKL 121/070				BB+ BNA

Flight Progress Strip(s)
FPS Nashville ATCT May 15, 2024 UTC

N47WT	2712	E1648	70			
¹ I/BE35/G	BNA 224/033		KREG MCB EWO../.KLOU			
744	ZCM					

24-002-BNA
N47WT

SECTION 9.

FAA Form(s) 8020-3, Facility Accident/Incident Notification Record

SECTION 10.
Weather Products

Memphis ARTCC

"I certify that the attached copy Pilot Report originated from the National Weather Service and is an accurate copy of the original."

5-20-2024

1606 GI S1 PIREP TM 1601 B737 25 NE MEM RPTD CONS LGT OCNL MOD CHOP
FL330. SEC26.../FDCS RM151606

24-002-BNA
N47WT

AIR TRAFFIC CONTROL
ATTACHMENT 5

ERA24FA217
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Memphis ARTCC

TMU PRE DUTY BRIEFING			
DATE <u>5-15</u>		WX	STANDUP
BOWDEN, SHARONDA	SY		
CANNON, JEREMIE	OW		
EILAND, SHERMAN	SN		
FRAZIER, ETHAN	FE		
JABR, RANI	RN		
JOHNSON, DAVID	GJ		
KERR, JAMES	KX		
KINSLER, HENRY	HK		
LISI, JENNA	NA		
MAY, AMANDA	AG		
MCCLOSKEY, ALEX	AL		
PEETE, JALEESA	JW		
RANKIN, TESSAS	JO		
ROUSSEAU, NICHOLAS	ZR		
WERTZ, BRACKEN	WZ		
WEYMERS, TIMOTHY	TW		

Memphis ARTCC

OMIC

Pre-Duty

Stand-up

5/15/2024

Bittick, B		
Hanna, M		
House, J		
Williams, S		
ATM		
Supervisor Day		
Supervisor EVE		
Supervisor/s MID		

Daily Pre-duty Weather Briefing & Stand Up

4

Date: 5/15/2024 5:52

Team 1			
Controller/Sup	Pre-Duty	Stand-up	MID
Beau, B (BX)			
Lucas, K (LU)			
Young, J (JL)			
Vaughn, W (VN)			
Joseph, R (RL)			
Brustuen, S (ST)			
Dickerson, M (MD)			
Ashraf, Z (XF)			
Detwiler, J (JA)			
Team 2			
Controller/Sup	Pre-Duty	Stand-up	MID
Huffman, L (HF)			
Champion, J (CH)			
Robison, W (WR)			
Prince, N (FP)			
Harlow, M (UF)			
Meliti, F (FM)			
Wilson, Tyler (TK)			
Gabrielson, R (YN)			
Weaver, T (WT)			
Team 3			
Controller/Sup	Pre-Duty	Stand-up	MID
VACANT			
Eure, S (SU)			
Mularcyk, A (BT)			
Inzetta, A (TZ)			
Knopf, D (DK)			
Weekes, C (CY)			
Team 4			
Controller/Sup	Pre-Duty	Stand-up	MID
Stanczak, D (ZS)			
Jenkins, J (FL)			
Dadah, R (NK)			
Judy, R (WV)			
Lazaro, E (IQ)			
Smith, A (AB)			

Team 5			
Controller/Sup	Pre-Duty	Stand-up	MID
VACANT			
Vander Linde, N (NV)			
Kunzman, D (DX)			
Kunz, J (KZ)			
Baudhuin, J (BN)			
Elrod, D (EL)			
Bahadirli, J (JZ)			
Cabrera, J (HP)			
Team 6			
Controller/Sup	Pre-Duty	Stand-up	MID
Paulk, R (RP)			
Aveille, Michael (AV)			
Russenberger, P (PI)			
Treadway, C (CT)			
Fielek, T (GP)			
Jones, T (OG)			
Quinlivan, R (RQ)			
Team 7			
Controller/Sup	Pre-Duty	Stand-up	MID
VACANT			
Gill, R (GI)			
O'Connor, L (LM)			
Mettee, J (JM)			
Stewart, S (FG)			
White, A (EI)			
Stakup, J (GS)			
Harris, N (NH)			
McDonaki, M (LG)			

24-002-BNA
N47WT

AIR TRAFFIC CONTROL
ATTACHMENT 5

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Daily Pre-duty Weather Briefing & Stand Up

6

Date: 5/15/2024 6:22

Crew 1			
Controller/Sup	Pre-Duty	Stand-up	MID
Haynes, J (ZJ)			
Jabr, E (EG)			
Jenkins, S (NN)			
Williams, W (XW)			
Chang, N (ET)			
Contreras, D (DG)			
Crew 2			
Controller/Sup	Pre-Duty	Stand-up	MID
Hollie, B (BZ)			
Dixon, A (NX)			
Gerald, A (AR)			
Giacomini, C (EZ)			
Skura, B (BP)			
Trosper, E (TR)			
Espinal, E (EY)			
Crew 3			
Controller/Sup	Pre-Duty	Stand-up	MID
Baarsch, J (JB)			
Hasley, E (UU)			
Jimenez, N (GG)			
Johnson, J (JD)			
Moreland, Z (YS)			
Crew 4			
Controller/Sup	Pre-Duty	Stand-up	MID
Helvey, B (LV)			
Coughlin, Timothy (TI)			
Haliburton, S (HR)			
Keith, J (TX)			
McCarty, L (LN)			
Brown, S (SI)			

Crew 5			
Controller/Sup	Pre-Duty	Stand-up	MID
Goins, J (HG)			
Hall, A (VO)			
Nelson, J (NL)			
Repp, L (LR)			
Rhodes, R (RW)			
Nelson, P (PK)			
Crew 6			
Controller/Sup	Pre-Duty	Stand-up	MID
Bowles, P (BG)			
Campbell, D (MI)			
Johnson, E (EJ)			
Johnson, R (YR)			
King, D (DA)			
Taylor, J (JT)			
Jolly, A (TJ)			
Taylor, S (QT)			
Crew 7			
Controller/Sup	Pre-Duty	Stand-up	MID
Peterson, R (PN)			
Bowie, J (BE)			
Burns, S (SB)			
Edoff, J (GO)			
Hancock, J (CB)			
Portanova, K (KP)			
Southerland, M (SO)			
Zhang, A (AZ)			
Marino, R (RV)			
Crew 8			
Controller/Sup	Pre-Duty	Stand-up	MID
Allen, M (MT)			
Pinckley, L (LP)			
Poteat, L (LS)			
Schwartz, C (OA)			

24-002-BNA
N47WTAIR TRAFFIC CONTROL
ATTACHMENT 5ERA24FA217
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Nashville ATCT

Weather Products 5/15/2024UTC

METAR KBNA 151653Z 30009KT 10SM FEW023 BKN036TCU BKN055 23/16 A2977 RMK AO2 SLP074
TCU ALQDS T02280161

METAR KBNA 151753Z 28007KT 10SM SCT036TCU BKN048 23/16 A2978 RMK AO2 RAB02E18 SLP0
78 TCU SW-N P0000 60003 T02280161 10233 20178 53005

I certify the attached copy of the METARs originated from the APG-link to archived
weather is an accurate copy of the original.

[REDACTED] [REDACTED]
[REDACTED] 5'00'

CATHLEEN NORTH
Staff Support Specialist
Nashville ATCT

24-002-BNA
N47WT

AIR TRAFFIC CONTROL
ATTACHMENT 5

ERA24FA217
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BNA PRE-DUTY WEATHER BRIEFING SIGN-OFF SHEET

May 15, 2024

Please write your operating initials on the line available next to your name (in the appropriate time slot) after viewing the pre-duty weather briefing. This briefing is required to be viewed prior to assuming the first position of your shift or, in the case of the 0530 shift, prior to assuming the first position after a briefing becomes available. This worksheet will be collected daily and saved with the FAA Form 7230-4, Daily Log. It will be retained for one year and audited for compliance. This worksheet must be attached to any "potentially significant" MOR.

NAME	DAY 0545	EVE 1200	MID 2045	NAME	DAY 0545	EVE 1200	MID 2045
Allyn, Cris				Klessner, Anthony			
Bess, Will				Klose, Nick			
Bonilla, Amy				Kraynik, Jonathon			
Brader, Steven				Kubicek, Joe			
Brandfast, Daniel				Leach, Matthew			
Captain, Nick				Lee, Jeremy			
Chappell, Kenneth				Letart, Eric			
Curless, Jacob				Linam, Paul			
Elliott, Brian				Lopez, John			
Fagerlund, Balder				McCants, Kevin			
Forcum, Tony				Mitchell, Will			
Gleaves, Nick				Powers, Brad			
Goldsby, Daniel				Roberts, Andy			
Graves, Garld				Romaker, Jaime			
Groher, Kevin				Routzahn, Robert			
Grubbs, Jesse				Snow, Bryan			
Hedrick, Zachary				Thompson, Darrius			
Hines, Jonathan				Upchurch, Julian			
Horton, Trevor				Waters, Marion			
Joines, Chad				Weckler, Scott			
Kendall, Jonathan				Winsinger, Dave			
Kendell, Jesse				Worthington, Mitch			

SECTION 11.

Other

UTC (Zulu) Time Conversion Chart

UTC (Zulu)	PST/ ALDT	PDT/ MST	MDT/ CST	CDT/ EST	EDT/ AST	ALST	HST
0000*	1600	1700	1800	1900	2000	1500	1400
0100	1700	1800	1900	2000	2100	1600	1500
0200	1800	1900	2000	2100	2200	1700	1600
0300	1900	2000	2100	2200	2300	1800	1700
0400	2000	2100	2200	2300	0000*	1900	1800
0500	2100	2200	2300	0000*	0100	2000	1900
0600	2200	2300	0000*	0100	0200	2100	2000
0700	2300	0000*	0100	0200	0300	2200	2100
0800	0000*	0100	0200	0300	0400	2300	2200
0900	0100	0200	0300	0400	0500	0000*	2300
1000	0200	0300	0400	0500	0600	0100	0000*
1100	0300	0400	0500	0600	0700	0200	0100
1200	0400	0500	0600	0700	0800	0300	0200
1300	0500	0600	0700	0800	0900	0400	0300
1400	0600	0700	0800	0900	1000	0500	0400
1500	0700	0800	0900	1000	1100	0600	0500
1600	0800	0900	1000	1100	1200	0700	0600
1700	0900	1000	1100	1200	1300	0800	0700
1800	1000	1100	1200	1300	1400	0900	0800
1900	1100	1200	1300	1400	1500	1000	0900
2000	1200	1300	1400	1500	1600	1100	1000
2100	1300	1400	1500	1600	1700	1200	1100
2200	1400	1500	1600	1700	1800	1300	1200
2300	1500	1600	1700	1800	1900	1400	1300
2400	1600	1700	1800	1900	2000	1500	1400

The time *0000 and 2400 are interchangeable. The time 2400 is associated with the date of the day ending, and 0000 with the day just starting.

UTC = Coordinated Universal Time, or Zulu
PST = Pacific Standard Time (UTC - 8 hours)
ALDT = Alaskan Daylight Time (UTC - 8 hours)
PDT = Pacific Daylight Time (UTC - 7 hours)
MST = Mountain Standard Time (UTC - 7 hours)
MDT = Mountain Daylight Time (UTC - 6 hours)
CST = Central Standard Time (UTC - 6 hours)
CDT = Central Daylight Time (UTC - 5 hours)
EST = Eastern Standard Time (UTC - 5 hours)
EDT = Eastern Daylight Time (UTC - 4 hours)
AST = Atlantic Standard Time (UTC - 4 hours)
ALST = Alaskan Standard Time (UTC - 9 hours)
HST = Hawaiian Standard Time (UTC - 10 hours)

24-002-BNA

N47WT

Corrective Action Plan

BNA-CAP-2021-0001

* Indicates required item

Basic Information:

Subject of CAP*

PIREP Solicitation & Dissemination

Safety Monitoring Watchlist

Identified Safety Risk or Hazard:

Risk or Hazard*

Lack of PIREP information could lead to insufficient situational awareness for both pilots and controllers.

The Non-Solicitation/Dissemination of PIREPs may cause pilots and controllers to not receive important weather information that may be

382 of 4000 characters used.

Background Information:

Detailed Description of Validated Safety Issue(s)*

The purpose of this Corrective Action Plan is to directly address non-compliant performance at Nashville ATCT with regard to PIREP solicitation and dissemination requirements. Despite numerous briefings addressing the importance of PIREPs, the facility continues to see a lack of compliance with FAA JO 7110.65 requirements.

904 of 4000 characters used.

Pertinent Regulations:

7110.65 - 2-6-2, PIREP Solicitation and Dissemination

Add Regulation

Select... ▼

Reference

Description

Add

Mitigation #1

☒ Complete

Type*

Briefing ▾

Level*

Facility ▾

Target Completion Date*

06/30/2021

Details*

The Air Traffic Manager and NATCA FACREP will collaboratively develop and publish a briefing for the workforce informing them of the Non-Compliance High rating during the most recent ECV. This briefing will include the JO 7110.65 reference as well as an explanation of new PIREP Solicitation and Dissemination Tracking

726 of 4000 characters used.

Mitigation #2

☒ Complete

Type*

Training ▾

Level*

Facility ▾

Target Completion Date*

07/16/2021

Details*

All personnel conducting OSAs will receive refresher training on conducting a proper OSA and highlighting the importance of accurately and completely capturing data. Emphasis will be placed on correctly evaluating PIREP Solicitation and Dissemination compliance to ensure continuity in OSAs. The Support Manager

416 of 4000 characters used.

Mitigation #3☒ Complete**Type***

Review ▾

Level*

Facility ▾

Target Completion Date*

06/18/2021

Details*

Facility Emphasis Item will be added for Dissemination of PIREP via AIS-R. Current Facility Emphasis Item for PIREP Solicitation/Issuance will be extended.

156 of 4000 characters used.

Mitigation #4☒ Complete**Type***

Other ▾

Level*

Facility ▾

Target Completion Date*

08/31/2021

Details*

The facility Training Department will include a biennial refresher training requirement for Operational Personnel covering Solicitation and Dissemination requirements.

168 of 4000 characters used.

Mitigation #5☒ Complete**Type***

Procedure ▾

Level*

Facility ▾

Target Completion Date*

05/31/2022

Historical Changes

- | Target Date | Employee | Justification Message |
|--------------|----------------|--|
| May 31, 2022 | Cathleen North | Final audits did not indicate the CAP could be closed yet. While significant improvement has been made, there are still a few areas which need to be worked on. The facility is extending the CAP for 90 days to continue this work. |
| Jan 31, 2022 | Don Schrader | Date selected does not allow for the target period of review and was updated to reflect at least a 180 day review period. |
| Sep 30, 2021 | Cathleen North | Original date |

Details*

All facility staff will receive a briefing on the following expectations:

The TRACON OSIC/CIC will serve as the focal point for the collection and dissemination of PIREP information. They will ensure all positions in the TRACON and Tower are notified of the

1346 of 4000 characters used.

Monitoring Item #1

☒ Complete

Type*

Review

Level*

Facility

Target Completion Date*

05/31/2022

Historical Changes

- | Target Date | Employee | Justification Message |
|--------------|----------------|---|
| May 31, 2022 | Cathleen North | Final audits did not indicate the CAP could be closed yet. While significant improvement has been made, there are still a few areas which need to be worked on. The facility is extending the CAP for 90 days to continue this work |
| Sep 30, 2021 | Cathleen North | Original date |

Details*

The Air Traffic Manager, Support Manager, and Operations Manager will each conduct a minimum of four (4) OSAs per month. All area-rated Operational Supervisors will conduct a minimum of two (2) OSAs per month in their respective areas. A BUE/NATCA representative/LSC member will conduct a minimum

953 of 4000 characters used.

Effectiveness Target*

Facility compliance for each OSA Emphasis Item must meet or exceed 90% at the end this period. If at the end of this period the percentage target is not reached, or if compliance percentage data supports action prior to this data review, this specific mitigation will be re-evaluated and additional modifications made.

319 of 4000 characters used.

Monitoring Results*

Results from all OSAs in 2022 to date indicate a greater than 90% compliance in the six areas being monitored. The report is attached below.

140 of 4000 characters used.

Monitoring Item #2☒ Complete**Type***

Other

Level*

Facility

Target Completion Date*

05/31/2022

Historical Changes

- | Target Date | Employee | Justification Message |
|--------------|----------------|---|
| May 31, 2022 | Cathleen North | Final audits did not indicate the CAP could be closed yet. While significant improvement has been made, there are still a few areas which need to be worked on. The facility is extending the CAP for 90 days to continue this work |
| Jan 31, 2022 | Don Schrader | Date selected does not allow for the target period of review and was updated to reflect at least a 180 day review period. |
| Sep 30, 2021 | Cathleen North | Original date |

Details*

- The facility Support Manager will determine when weather conditions warrant targeted OSA's for evaluation of PIREP Solicitation and Dissemination.

- The Support Manager will notify the individuals noted within

473 of 4000 characters used.

Effectiveness Target*

The goal is to ensure PIREPs are solicited and disseminated in accordance with directives at a compliance rate of 90% or greater.

129 of 4000 characters used.

Monitoring Results*

Results from all OSAs in 2022 to date indicate a greater than 90% compliance in the six areas being monitored. The report is attached below.

140 of 4000 characters used.

Monitoring Item #3☒ Complete**Type***

Audit

Level*

Facility

Target Completion Date*

05/31/2022

Historical Changes

- | Target Date | Employee | Justification Message |
|--------------|----------------|---|
| May 31, 2022 | Cathleen North | Final audits did not indicate the CAP could be closed yet. While significant improvement has been made, there are still a few areas which need to be worked on. The facility is extending the CAP for 90 days to continue this work |
| Jan 31, 2022 | Don Schrader | Date selected does not allow for the target period of review and was updated to reflect at least a 180 day review period. |
| Sep 30, 2021 | Cathleen North | Original date |

Details*

A PIREP audit of QC OSA's will be accomplished once per month for a period of 6 months targeting the Emphasis Items associated with this CAP. These audits will be evaluating the accuracy, completeness, and effectiveness of the mitigations.

239 of 4000 characters used.

Effectiveness Target*

Facility compliance for each OSA Emphasis Item must meet or exceed 90% at the end this period. If at the end of this period the percentage target is not reached, or if compliance percentage data supports action prior to this data review, this specific mitigation and monitoring plan will be re-evaluated and additional

339 of 4000 characters used.

Monitoring Results*

Results from all OSAs in 2022 to date indicate a greater than 90% compliance in the six areas being monitored. The report is attached below.

140 of 4000 characters used.

Monitoring Item #4☒ Complete**Type***

Review

Level*

Facility

Target Completion Date*

05/31/2022

Historical Changes

- | Target Date | Employee | Justification Message |
|--------------|----------------|---|
| May 31, 2022 | Cathleen North | Final audits did not indicate the CAP could be closed yet. While significant improvement has been made, there are still a few areas which need to be worked on. The facility is extending the CAP for 90 days to continue this work |
| Jan 31, 2022 | Don Schrader | Date selected does not allow for the target period of review and was updated to reflect at least a 180 day review period. |
| Sep 30, 2021 | Cathleen North | Original date |

Details*

In an effort to measure the performance of the facility, and the effectiveness of the mitigations, a collaborative review will be conducted by the TEME QC department and the NATCA BNA safety representative, (90) an again at (180) days days.

240 of 4000 characters used.

Effectiveness Target*

Prior to the closing of this CAP, a joint team of district personnel assigned by the GM or AGM and NATCA participant(s), will be assembled at approximately 180 days from the implementation date of this CAP. The team will conduct an audit to ensure facility compliance in all of the initiated action items. The ESA QCG may

341 of 4000 characters used.

Monitoring Results*

After a final 4 hour PIREP audit, a meeting was convened and it was determined the requirements of the CAP have been met. While there is still work to do, the facility meets the 90% effectiveness target. The facility will continue to have PIREP Solicitation and Dissemination as a special emphasis item and

362 of 4000 characters used.



Supporting Data:

Other – Mitigation 2--OSA Refresher

Other – Monitor 3--August 2021 PIREP Audit

Other – Monitor 4--Closure Meeting

Other – Mitigation 5--PIREP Solicitation/Dissemination Worksheet

Other – Mitigation 1--Completion Report for ECV Mitigation for PIREPs Briefing

Other – Mitigation 5--Weather Dissemination CAP and Updated Tracking Form

Other – Monitor 3--7.25.21 Audit Worksheet

Other – Monitor 3--7.25.21 Audit Memo

Other – Monitor 3--AISR Audit August 2021

Other – Mitigation 3--October 2021 PIREP Audit

Other – Mitigation 4--Memo to Training Dept

Other – Monitor 3 -- AISR Audit October 2021

Other – Monitor 3 -- Audit for July 15-July 31, 2021

Other – Monitor 3--September 2021 PIREP Audit

Other – Monitor 3--AISR Audit September 2021

Other – Mitigation 1--ECV Mitigation for PIREPs Briefing

Other – Monitor 3--Audit for Jun 14-July 14, 2021

Other – Mitigation 2--Completion Report

Other – Mitigation 3--AISR Audit December 2021

Other – Mitigation 3--AISR Audit November 2021

Other – Mitigation 3--December 2021 PIREP Audit

Other – Mitigation 3--December 2021 AISR Audit

Other – Mitigation 3--November 2021 PIREP Audit

Other – Mitigation 3 -- PIREP OSA Audit March 2022

Other – Mitigation 3 -- PIREP OSA Audit February 2022

Other – Mitigation 3 -- AISR Audit March 2022

Other – Mitigation 3 -- AISR Audit February 2022

Other – Monitor 5 -- 180 Day Meeting

Other – Monitor 1-3 -- January through May 2022 Results



Other – April 2022 Audit--4 hours



Other – Final 4 hour PIREP Audit 4.6.2022

Add Attachment

Select type... ▼

CAP Approval:*

☒ **Approved** ☐ **Not Approved**

Approved: Don Schrader

Jun 17, 2021

Resolution Approval:*

☒ **Approved** ☐ **Not Approved**

Approved by: Brian Moore

Jun 2, 2022

Additional details*

Team,

TEME District Leadership agrees that this CAP may be closed by BNA.

78 of 4000 characters used.