

CEN24LA144

AIR TRAFFIC CONTROL

Group Chairman's Factual Report - Attachment 6

IND Procedures

June10, 2025



FAA - IND ATCT
INDIANAPOLIS INTERNATIONAL AIRPORT
8100 COL. H. WEIR COOK MEMORIAL DRIVE SOUTH
INDIANAPOLIS, IN 46241



Picture taken by Christopher Hall, IND CPC

ORDER – IND 7110.65F
STANDARD OPERATING PROCEDURES (SOP) - OPERATIONS

August 9, 2019

DISTRIBUTION: IND ATCT

INITIATED BY: IND-1

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RECORD OF CHANGES

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FAA Form 1320-5 (6-80) SUPERSEDES PREVIOUS EDITION

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

IND N 7110.083

Indianapolis Airport Traffic Control Tower
8100 Col. H. Weir Cook Memorial Drive S.
Indianapolis, IN 46241

Effective Date:

March 21, 2024

Cancellation Date:

August 9, 2024

SUBJ: IND 7110.65F - Standard Operating Procedures (SOP)

- 1. Purpose of this Notice.** This notice adds guidance to the IND Order 7110.65F, Standard Operating Procedures (SOP) regarding Feeder Radar's responsibility for Cincinnati Airport Traffic Control Tower (CVG ATCT) Terminal Area arrivals that are above 14,000 feet.
- 2. Audience.** This Notice applies to all Indianapolis Airport Traffic Control Tower (IND) operational personnel.
- 3. Where can I Find This Notice?** This notice is available in the IND Tower SOP Binder, the IND TRACON SOP Binder and in the FAA Facility Directives Repository at <http://loa.faa.gov>
- 4. Cancellation.** This notice is canceled upon the publication of IND Order 7110.65G, Standard Operating Procedures (SOP) effective August 9, 2024.
- 5. Explanation of Policy Change.** This change to IND Order 7110.65F, Standard Operating Procedures (SOP) adds guidance regarding waiving the requirement to use flight progress strips for Indianapolis International Airport arrival aircraft.
- 6. Procedures.** Amend IND Order 7110.65F by amending paragraphs CHAPTER 4. TRACON, Section 5. FEEDER RADAR (FR), 4-5-1 DUTIES AND RESPONSIBILITIES., b. CVG Arrivals to read as follows:

CHAPTER 4. TRACON

Section 5. TRACON FEEDER RADAR

Title through subparagraph 4-5-1. a., No Change.

b. CVG Arrivals. Ensure CVG TRACON terminal area arrivals at 14,000 feet or above have "CVG" in the FDB. FR must not permit said CVG TRACON terminal area arrivals to descend below 14,000 feet until they are within the lateral confines of Area X as depicted in Appendix D.

No further changes to paragraph.

03/21/2024

IND N 7110.083

Anthony R. Marchese
Air Traffic Manager
Indianapolis Airport Traffic Control Tower

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FOREWORD

The provisions of this directive are supplemental to procedures and phraseology prescribed in FAAO 7110.65-Air Traffic Control, FAAO 7210.3-Facility Operation and Administration and FAAO 7210.634-Air Traffic Organization Quality Control. It prescribes air traffic control procedures and responsibilities for use by personnel assigned to the Indianapolis Airport Traffic Control Tower. Specialists are required to be familiar with the provisions of this directive that pertain to their operational responsibilities. Specialists are to exercise their best judgment if they encounter a situation not specifically covered by this directive to ensure aircraft safety.


Kenneth N. Johnson
Air Traffic Manager
Indianapolis Airport Traffic Control Tower

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CHAPTER 1. ADMINISTRATIVE

Section 1. INTRODUCTION

1-1-1 PURPOSE. This order prescribes standard operating procedures for use by persons providing air traffic control services at the Indianapolis (IND) Airport Traffic Control Tower (ATCT) and Terminal Radar Approach Control (TRACON). Specialists are required to be familiar with the provisions of this directive that pertain to their operational responsibilities. Specialists are to exercise their best judgment if they encounter a situation not specifically covered by this directive to ensure aircraft safety.

1-1-2 AUDIENCE. This order applies to all IND air traffic control specialists, air traffic assistants and operations supervisors.

1-1-3 WHERE CAN I FIND THIS ORDER? This order is available in the IND TRACON, IND Tower, IND Staff Office, IND Library and Facility Directives Repository at <https://loa.faa.gov/home.cfm>.

1-1-4 WHAT THIS ORDER CANCELS. IND 7110.65E, Facility Standard Operating Procedures, dated October 14, 2014.

1-1-5 EXPLANATION OF CHANGES. IND 7110.65F, Facility Standard Operating Procedures CHG 9 incorporates NOTICE IND N7110.079 thru NOTICE IND N7110.082. Additional changes are detailed in the Change 9 EXPLANATION OF CHANGES section. Various editorial changes were made without any change to intent.

Where editorial/format changes are necessary, revision bars were not used because of the insignificant nature of these changes.

1-1-6 EFFECTIVE DATE. This order is effective August 9, 2019.

1-1-7 TERMS, ABBREVIATIONS, ACRONYMS AND IDENTIFIERS. Terms, abbreviations, acronyms and identifiers used in this document are contained in Appendix G.

1-1-8 REVISION AND PUBLICATION EFFECTIVE DATES.

This Order and its changes are to be published every six months. The effective date of the changes will be the first full week of the months of February and August. All information for inclusion into a change must be submitted by the below listed dates:

Change Number	Information Cut-off Date	Publication Effective Date
Change 1	1/1/20	2/8/20
Change 2	7/1/20	8/7/20
Change 3	1/1/21	2/12/21
Change 4	7/1/21	8/6/21
Change 5	1/1/22	2/11/22
Change 6	7/1/22	8/12/22
Change 7	1/1/23	2/10/23
Change 8	7/1/23	8/11/23
Change 9	1/1/24	2/9/24
IND 7110.65G	7/1/24	8/9/24

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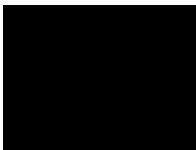
CHAPTER 2. GENERAL

Section 1. FACILITY

2-1-1 EQUIPMENT. Detailed equipment operating instructions are located in the IND Facility Equipment/SOP Supplement Binder. This binder is located in the TRACON and Tower and is the main source for operating instructions.

- a. **Altimeter.** DASI altimeter is the primary source of altimeter data. ASOS altimeter is the back-up source of altimeter data.
- b. **Approach Lights.** Approach lights are selected and monitored via the ICMS.
- c. **Approach Light System Generator.** Approach light system generators are available for runway 5L and 5R. Approach light system generators are selected and monitored via the ICMS.
- d. **ASOS.** The ASOS is the primary means of IND weather information. ASOS imports directly into the IDS.
- e. **ASR-9 System Control.** The system control panel and associated monitor are located in the TRACON.
- f. **ATIS.** The manual ATIS is located in the Tower and is the primary back-up for the D-ATIS.
- g. **Checklists.** Checklists are located in Appendix B, the IDS and are available in hardcopy at each operational position.
- h. **Commercial Telephone.** Commercial telephones are located in each operating quarters and throughout the facility. The following commercial telephone lines are recorded:

- 1.
- 2.
- 3.
- 4.



- i. **Count-Ops.** The Count-Ops computer is located in the TRACON.
- j. **Crash Phone.** The telephone in the Tower is a direct method of communication with Airport Dispatch for aircraft emergencies. The commercial telephone, via dialing 9-911, must normally be used for communication with Airport Dispatch for medical emergencies.
- k. **CRU-Art.** CRU-Art may be accessed at computers in the Tower, TRACON and TRACON Sign-In area.
- l. **D-ATIS.** The D-ATIS is available at the TDLS computer stations in the Tower. The stations may be toggled between D-ATIS, PDC and FDIO.
- m. **DME.** DME monitor panels are located in the Tower and TRACON.
- n. **ECS.** The Pet-2000 transceivers are located in the Tower and TRACON. The transceivers are a secondary back-up to the VSBP, if available at the operational position.
- o. **EFSTS.** EFSTS scanners and key packs are located in the Tower at the LCE, LCW and LCC/GCC positions. EFSTS printers are located at the DR positions. Back-up EFSTS printers are at the opposing DR positions. Additional back-up EFSTS printers are located at STS, STN and FRB.

p. FDIO Printers.

PRINTER	LOCATION	FUNCTION	BACK-UP
FD-1	LCC/GCC	IND Departure Proposals, NAS information and TMU information.	FD-2
FD-2	CS	IND Departure Proposals, NAS information and TMU information.	FD-1
AD-1	AD	Satellite Proposals, Arrivals, Overflights, NAS information and TMU information.	AD-2
AD-2	DRE-2	Satellite Proposals, Arrivals, Overflights, NAS information and TMU information.	AD-1

q. FFM. Units are available for runway 5L and 5R. Units are selected and monitored via the ICMS. The FFM(s) have visual and aural alarms. The aural alarm may be silenced while the FFM remains in an alarm condition. The total length of the alarm is approximately 100 seconds. If the object that creates the alarm does not leave the localizer critical area within the time limit, the FFM shuts the localizer down. Once the localizer is shut down by the FFM, the localizer cannot be selected and must be reset by a technician at the localizer building.

r. ICMS. Two systems are located in the Tower. The system located between the GC and the LCC/GCC position is the “Master” and the other is the “Client”. One system is located in the TRACON and is a “Client”.

1. The “Master” ICMS provides control and monitor capability to:
 - (a) ILS: runway 5L, 5R, 14, 23L, 23R, 32.
 - (b) FFM: runway 5L and 5R.
 - (c) approach lights: all runways.
 - (d) approach light system generators: runway 5L and runway 5R.
 - (e) RVR: all runways.
2. “Client” ICMS(s) provide:
 - (a) control and monitor capability to:
 - (1) approach lights: all runways.
 - (2) approach light system generators: runway 5L and runway 5R.
 - (3) RVR: all runways.
 - (b) monitor capability to:
 - (1) ILS: runway 5L, 5R, 14, 23L, 23R, 32.
 - (2) FFM: runway 5L and 5R.

s. IDS. IDS displays are available at each operational position. Updating and data input responsibilities are contained within the operational position responsibilities within this directive. The IDS SIA pages are runway and operational position sensitive (IE, “CD 05’s”) and must be set to the proper runway configuration to properly display data.

- t. **ILS.** The ILS for all runways is selected and monitored via the ICMS.
- u. **ITWS.** ITWS displays are available in the Tower and TRACON. ITWS displays current and forecast weather conditions. ITWS generates LLWAS wind, microburst and wind shear information and automatically imports into the IDS. In the event of an alert, an alert box will automatically display in the IDS
- v. **LLWAS.** LLWAS wind information, microburst and wind shear alerts are generated by the ITWS and automatically imported into the IDS.
- w. **PDC.** The PDC is available at TDLS computer stations in the Tower. The stations may be toggled between PDC, D-ATIS and FDIO.
- x. **RDVS.** Each operational and overhead position is equipped with an RDVS panel. The panel provides access to frequencies, inter-facility landlines, intra-facility landlines, record button (RB) and PBX lines. Primary and stand-by (if available) frequencies are selectable. All audio data routed through an RDVS position is recorded. Headsets must be used at all positions, except AD, unless otherwise authorized by the CS/TS..

1. Frequencies.

POSITION	PRIMARY FREQUENCY		VSBP	POSITION	ADDITIONAL FREQUENCY/ PBX LINES	PRIMARY USE	VSBP
				GA2	As Assigned	Special Event	
FD	125.47		√	STS	120.65	MIE / AID	
CD	128.75		√	STS	134.85	BAK	√
GC	121.8, 121.9*		√	STS	135.45	Rushville RTR	
LCE	120.9*		√	DRW on 5/23 DRE on 14/32	126.07	ZAU and GUS	√
LCW	VHF	127.82	√	DRE on 5/23 DRW on 14/32	118.67	ABB	√
	UHF	257.8		AD	PBX 1-4**		
DRE	VHF	124.95*	√	AD	121.62	UMP RTR	√
	UHF	317.8, 377.1		AD	128.6	EYE RTR	√
				AD	119.25	MQJ RTR	√
DRW	119.05		√	AD	125.275	Heliport RTR	
STS	127.15*		√				
STN	124.65		√				
FRB	121.1*		√				
FRD	128.175		√				
FNI	120.52		√	* Preferred frequency during combined positions			
FNF	123.95*		√	** PBX Lines 1-4 are routed to RDVS positions and are recorded.			

2. Landlines.

RDVS LABEL	DESTINATION	RDVS LABEL	PRIMARY DESTINATION
HUF	HUF TRACON	53	ZID
GUS	GUS RAPCON	60	ZID TMU
CMH	CMH TRACON	67	ZID
CVG	CVG TRACON	68	ZID
FWA	FWA TRACON	71	ZAU TMU
BAK	BAK ATCT	72	ZAU
MIE	MIE ATCT	73	ZAU
BMG	BMG ATCT	81	FSS and other.
AIR-GRD	R3401 AIR GUARD OPERATIONS OFFICE	93	AID ATCT and other.
		FEDEX	FDX RAMP TOWER

y. RVR. RVR information is automatically displayed with proper IDS configuration. RVR information may be displayed on the ICMS in the event of IDS failure and is for back-up purposes only. ICMS RVR data is not continuously updated. In the event of an ICMS computer failure, the ICMS RVR will display the last RVR reading and may no longer be accurate.

z. TFDM TFDM Monitors are located at each of the operating positions in the tower except for the Ground Assist position. The FD TFDM monitor is located adjacent to LCW. A TFDM monitor is also located at the CS position.

aa. TFMS. Two complete systems and two additional displays are located in the TRACON. Two complete systems are located in the Tower.

bb. VSBP. The VSBP is the primary back-up to an RDVS radio failure. The VSBP is accessed via the orange headset jacks. The jacks indicate which frequencies are serviced and are available at several operational positions.

cc. Wind. Utilize LLWAS wind information (primary) and ASOS (1-minute) wind information (back-up) for operational purposes.

2-1-2 DUTY FAMILIARIZATION. Duty familiarization is required on all positions by operational personnel. The Briefing Items and Tasks assigned in TEAM and CEDAR are to be read and/or acknowledged as required. Once an individual acknowledges a Briefing Item and/or Task, they are responsible for knowing and correctly applying the item content. All questions or discrepancies should be forwarded to the TS.

a. Briefing Item Completion Requirements

- 1. Pre-Duty.** Review prior to assuming an operational position.
- 2. Current (CEDAR).** Review during current shift.
- 3. Read & Acknowledge (TEAM).** Review during current shift.
- 4. Non-Training Assignment / Miscellaneous.** Review at employee discretion.

b. Pre-Duty Weather Briefing Task Requirements

- Prior to working the first position of the shift, operational personnel must view the Pre-Duty Weather Briefing by selecting the Pre-Duty Weather Briefing link from the CEDAR Links Menu.

2. Operational personnel must acknowledge completion of the Pre-Duty Weather Briefing before working an operational position by signing the PRE-DUTY WX BRIEFING LOG at the Operations Supervisor's Desk in the TRACON.

2-1-3 INTERPHONE MESSAGE AND RADIO COMMUNICATION FORMAT.

Specialists may identify the facility as "Indy" or "Indianapolis". Example: "Indy Approach" or "Indianapolis Approach".

2-1-4 STRIP MARKING. Locally required strip marking is indicated as shown based on the 3 line flight progress strip for TFDM in the tower and the standard strip for TRACON operations.

- a. **Tower Strip Marking – Departures** (Required fields shown in grey). Blocks with a blue dashed border  indicate the data in that block has changed. Removing the blue border indicates the pilot has acknowledged the updated information.

ERAM Generated Flight Plan Departure Strip Layout

25- STATE	1 ACID		5 BEACON		8 DEPT		9 ROUTE		9B SYM - 1		10 ATIS		11 APREQ		12		26- NLA				
	3 TYPE		6 PTIME		8C AOI		8A RWY		9A		9C SYM - 2		13		14 EDCT			15			
	4 CID		2B STRIP R OR 2 RE		4B TDLS		7 REQ ALT		8B DEST		9D		9E REMARKS		16 TMAT			17 TAXI		18	
	19 GATE		20 HEADING		21 INIT ALT		22 FREQ		23 FAC REMARKS 1		24 FAC REMARKS 2										

STARS Generated Flight Plan Departure Strip Layout

25- STATE	1 ACID			5 BEACON		8 DIRECT		9 LOCAL ROUTE			10 ATIS		11		12 RLS RNG		26- NLA		
	3 TYPE			6		8A RWY		9B SYM-1		9C SYM-2		13		14 VFR IND		15			
	2		X		X		X		7 LOCAL ALT		8B DEST		16		17			18 ATOT	
	19 GATE		20 HEADING		21 INIT ALT		22 FREQ		23 FAC REMARKS-1			24 FAC REMARKS-2							

BLOCK	REQUIRED STRIP MARKING	MEANING
1	"N12345", etc.	Aircraft identification.
2		Revision number (FDIO locations only).
2A	✓	Voice Clearance Issued Checkbox
3	"2/A10/R", "P28R/G", etc.	Number of aircraft if more than one, RECAT indicator, type of aircraft, and aircraft equipment suffix.
3 & 4	"RS"	Remove Strip watermark
4	"420", etc.	Computer identification number (if required).
4B	 W	TDLS Clearance Indicators.
5	"7377", etc.	Secondary radar (beacon) code assigned.
6	"P1235", etc.	Proposed departure time. P-Time.
6 & 7	"E" or "P"	Emergency watermark or Priority Aircraft watermark

BLOCK	REQUIRED STRIP MARKING	MEANING
7	"330", etc.	Requested Altitude.
8		OPTIONAL USE..
8A	23L  5L A5	Departure Runway. When the block is highlighted orange, it indicates a non-designated runway has been assigned for departure. An intersection departure is indicated with a watermark of the intersection below the runway assignment
8B	"KBOS", etc.	Destination Airport.
8C	"M2"	Intersection departure location
9	"KIND MAREO5 BDOCK DJB JHW Q82 PONCT JFUND2 KBOS" etc.	Route and destination.
9A	"OP"	Operational Priority watermark.
9B / SYM-1		OPTIONAL USE.
9C / SYM-2	"14/G"	Hold short instructions watermark
9D	 ✓	FRC Checkbox. The Block is highlighted when FRC is required and a checkmark indicates that the FRC was issued to and read back by the pilot.
9E	"FRC" etc.	Computer-generated: Remarks including FRC
10	"B", etc. or "WX"	ATIS Code or Pilot : 1. stated "have the numbers". or 2. issued departure information. or 3. issued current weather, runway in use, pertinent NOTAM(s), etc.
11	"1235, 1521" etc.	Approval Request (APREQ)- TMU ESP/CFR release time - manually entered and TBFM generated.
11 & 14	"RLSD, AoB, AoA, +/-5"	TMU release time qualifier
12	26-28	TMU release time range OPTIONAL USE.
12 & 15	"ODO"	Opposite Direction Operation watermark
13		OPTIONAL USE..
14	"0055, 2133" etc. or "V"	EDCT Release Time or VFR indicator
15		OPTIONAL USE.
16		OPTIONAL USE.
17		OPTIONAL USE.
17 & 18	"5" "DEICE"	Fed Ex Ramp Point or Deicing watermark
18	"1515" etc.	Actual Takeoff Time.
19	"A5, B15, IMC, IAB-CUS, MIL FBO, SIG FBO" etc.	Gate, De-icing Location or ramp exit point
20	"245, 215, 070, 140" etc.	Heading. No heading in this block indicates the aircraft is assigned runway heading.
21	"30", "25", etc.	Initial Altitude. No altitude in the block indicates the aircraft is assigned 5,000 feet MSL.

BLOCK	REQUIRED STRIP MARKING	MEANING
22	"124.95", etc	Frequency. If not Std Freq issued.
23		Facility Remarks & AOI.
24		MIT/MINIT Facility Remarks.
25	"D, GC, LUAW-23L, CFTO-5R, DEPT ARCH" etc.	EFS STATE.
26	"GC, LC-23R, LUAW-23L, CFTO-5R, DEPT ARCH" etc.	Next Logical Action.

b. Tower Strip Marking – Arrivals

ERAM Generated Flight Plan Strip Layout

25- STATE	1 ACID	5 BEACON	8 EST COORD	9 FLT RULES	10	11	12	26- NLA
	3 TYPE	6 PREV FIX	8A	9A DEST	13	14	15	
	4 CID	7 COORD FIX	8B	9E REMARKS	16	17 TAXI	18	
	19 GATE	20	21	22	23 FAC REMARKS-1	24 FAC REMARKS-2		

ERAM Generated Flight Plan 2 Line Strip Layout

25- STATE	1 ACID	5 BEACON	8 EST COORD	9 FLT RULES	9A DEST	9B SYM-1	9C SYM-2	11 APCH	15	26- NLA
	3 TYPE	7 COORD FIX	8A RWY	19 GATE	9E REMARKS			[B23] ERAM A		

STARS Generated Flight Plan Strip Layout

25- STATE	1 ACID	5 BEACON	8 LOC	9 LOCAL ALT	9A DEST	10	11	12	26- NLA
	3 TYPE	6	8A RWY	9B SYM-1	9C SYM-2	13	14 VFR IND	15	
	2	7	8B			16	17 TAXI	18	
	19 GATE	20	21	22	23 FAC REMARKS-1	24 FAC REMARKS-2			

BLOCK	REQUIRED STRIP MARKING	MEANING
1	"N67890", etc.	Aircraft identification.
3	"2/A10/R", "P28R/G", etc.	Number of aircraft if more than one, RECAT aircraft indicator, type of aircraft, and aircraft equipment suffix.
3 & 4	"RS"	Remove Strip watermark
5	"7377", etc.	Secondary radar (beacon) code assigned.
6 & 7	"E" or "P"	Emergency watermark or Priority Aircraft watermark
7	"CLANG"	Coordination fix. OPTIONAL USE.
8	"1317"	Estimated time of arrival at the coordination fix or destination airport.

BLOCK	REQUIRED STRIP MARKING	MEANING
8A	"5L, 23L" etc.	Runway Assignment
9	"IFR" or 25" etc.	Flight Rules on ERAM strip – Local Altitude on STARS strip
9A	"KIND"	Minimum fuel, <u>destination airport</u> /point out/radar vector/speed adjustment information. Air traffic managers may authorize in a facility directive the omission of any of these items, except minimum fuel, if no misunderstanding will result.
9B SYM-1		OPTIONAL USE.
9C SYM-2		OPTIONAL USE.
9E		Computer-generated: Remarks.
11		OPTIONAL USE.
15		OPTIONAL USE.
19	"A5, B15, IMC, IAB-CUS, MIL FBO, SIG FBO" etc.	Gate
23		Facility Remarks - OPTIONAL USE.
25	"LC, GC" etc.	EFS STATE.
26	"CTL, GC" etc.	Next Logical Action.

c. TRACON Strip Marking - Departures.

Altitude information may be written in thousands of feet (IE, 5,000 feet as 5 and 2,800 feet as 2.8)

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

BLOCK	REQUIRED STRIP MARKING	MEANING
1	"N12345", etc.	ACID (full, if known).
3	"C210/A", "P28R/G", etc.	Aircraft type and equipment suffix.
8A	"60", "6", "130", "13", etc.	Altitude.
8B	"30", etc.	Departure altitude.
9A	"RY ## DP, ###°"	Satellite airport DP or ODP, heading to be flown "when able". or
	"→Δ ###°"	Satellite airport specific initial heading to be flown after takeoff so as to only apply within controlled airspace.

BLOCK	REQUIRED STRIP MARKING	MEANING
10	√ (checkmark)	Clearance issued.
12	VIS	Pilot provided visual separation is being applied with the proceeding aircraft.
11, 12, 14 15, 17, 18	"EDCT", "RLS", "V <", "V < / ", etc.	TMU Information or satellite airport release restrictions. "Advise Intentions" time is required if other than the default ten (10) minutes after clearance void time.
12, 15, 18	<i>Hi-Lite Applied</i>	TMU Action Required (CFR, etc.)
16	"33", "25", etc.	Satellite airport departure runway.

Departure Examples:

FONT indicates computer generated information.

FONT indicates handwritten required strip marking.

AAL1686 1 INZA	6231	KIND	+ROCKY# STL+			VIS
MD82/Q	P1525	60 130	KIND STL BYP# KDFW			
762	350	50		23R		RH

DAL6482 2 INZA	6750	KIND	KIND DAWNN# BWG RMG# KATL			
MD82/W	P1210	6 13				
390	340	50		23L		210

LOF5500 3 INZA	4004	KIND	KIND ROCKY# TTH VLA VLA# KSTL			
E145/W	P1310	60 130				
652	230	30		32		260

N800CR 4 INZA	4535	EYE	+OOM# PXV EVV+	√	<i>RLS</i>	
HXB/G	P1445	6 13	KEYE KEVV		<i>V <</i>	<i>1510</i>
765	150	<i>3</i>	<i>RY 21 DP, 270°</i>	<i>21</i>		

N500CG 5 INZA	6255	EYE	+MAREO# BDOCK AIR WISKE#+	✓	RLS	
LJ45/Q	P0015	6 13	KEYE KAGC		V<	0100 /0125
618	350	3	O FRC ✓ RY 3 DP, 050°	3		

N81PS 6 INZA	4645	MQJ	KMQJ KLOU	✓	RLS	
BE30/G	P1256	60 90			V<	1310
185	90	30	RY 25 DP, 180°	25		

EJA221 7 INZA	4424	UMP	+MEARZ# OKK FISSK#+	✓	RLS	
C750/G	P2125	60 130	KUMP OKK KMDW		V<	2130
208	350	30	→Δ 320°	33		

N1059N	0203	HFY	HFY BAK	✓	RLS	
C172/G	P2125				V<	2130
	30	30	→Δ 140°	19		

2. Arrivals.

BLOCK	REQUIRED STRIP MARKING	MEANING
9, 9A, 9B, 9C	"110", "11", "70", "7", "27", "2.7", etc.	Altitude.
9C	YC, YCT	Your control, Your control for turns
13	"A" (ATIS Code)	Pilot acknowledged receipt of specified towered satellite airport ATIS information.
	"WX"	As appropriate, pilot: 1. stated "have the numbers". 2. issued landing information. 3. issued towered satellite airport approach information (current weather, runway in use, pertinent NOTAM(s), etc.). 4. acknowledged receipt of satellite airport automated weather information (ASOS, AWOS, etc.). 5. advised "no weather information available".
16	"VOR 33", "ILS 25", etc.	Satellite airport expected approach.

Arrival Examples:

FONT indicates computer generated information.

FONT indicates handwritten required strip marking.

DAL123 1 INZA	6727	A1508	IFR 130 <i>110</i>			
H/B753/Q	BVT		70 <i>40 30 27</i>			
909	JAKKS		KIND			

N510EC 2 INZA	4323	A1824	IFR 110			
GLF4/Q	ANTTI		70 <i>4 2.9 2.7</i>	<i>WX</i>		
605	ANTTI		KTYQ	<i>ILS 36</i>		

N303MC 3 INZA	4651	A1351	IFR 110			
C750/Q	ANTTI		70 40 30 <i>28</i>	<i>D</i>		
205	MIE		KMIE	<i>ILS 32</i>		

N285CA 4 INZA	4443	A1936	IFR 130 <i>110</i>			
GLF3/Q	JAKKS		70 30 <i>2.8</i>	<i>WX</i>		
645	JAKKS		KMIE <i>YCT</i>	<i>ILS 32</i>		

N263LJ 5 INZA	4323	A2245	IFR 110			
LJ35/Q	CLANG		70 <i>4 30</i>	<i>WX</i>		
605	CLANG		KAID	<i>ILS 30</i>		

N264CE 6 INZA	4132	A0645	IFR 110			
J328/Q	CLANG		70 <i>4 30 2.5</i>	<i>WX</i>		
238	CLANG		KBAK <i>YC</i>	<i>ILS 23</i>		

<i>N222KB</i>	<i>0222</i>	<i>1845</i>	<i>IFR</i>			
<i>C210/G</i>			<i>4 30 2.7</i>	<i>WX</i>		
			<i>MQJ</i>	<i>ILS 25</i>		

3. Enroute.

BLOCK	REQUIRED STRIP MARKING	MEANING
1	"N12345", etc.	ACID (full, if known).
3	"C210/A", "P28R/G", etc.	Aircraft type and equipment suffix.
5	"0201", etc.	Local IFR transponder code (0201-0237).
	"0301", etc.	Local VFR transponder code (0301-0377).
8	"1600", etc.	Radar identification time.
9	"110", "80", "45", etc.	Altitude.
9A	"HUF", "DAY", etc.	VFR destination, if known.
9B	"OTP"	VFR-ON-TOP

Enroute Examples

FONT indicates computer generated information.

FONT indicates handwritten required strip marking.

DAL748 1 INZA	6275	E1101	230 <i>11</i>			
B738/J	SHB		KSEA SHB CEGRM# KCVG			
405	CVZ					

N210RS 2 INZA	3576	E2005	80 <i>60</i>			
C210/G	DQN		KDAY V50 VHP KICT			
865	HUZ					

<i>N222KB</i>	<i>0201</i>	<i>1647</i>	<i>85</i>	<i>OTP</i>	✓		
<i>C210/R</i>			<i>SHB VHP CFJ</i>		<i>WX</i>		
					<i>NDB4</i>		

<i>N414BC</i>	<i>0301</i>	<i>1845</i>	<i>4.5</i>			
<i>PA28/G</i>						
			<i>HUF</i>			

2-1-5 TRANSFER OF POSITION RESPONSIBILITY. The relieving specialist and the specialist being relieved must share equal responsibility for the completeness and accuracy of the position relief briefing. The following procedures must apply:

- a. All position relief briefings must be conducted utilizing position relief checklists contained in (Appendix B) and must be recorded.
- b. Record same position relief briefings utilizing the RDVS record button (RB). Record combining/de-combining position relief briefings utilizing the RDVS “override” button. Observing, as required, means visually and aurally monitoring the position (IE, “plugged in”).
- c. The briefing must include, at a minimum:
 1. **The relieving specialist:**
 - (a) May drag and drop name into the CRU-Art “Other Duties” area. This provision does not apply when combining positions.
 - (b) Relieving specialist must review the SIAs and follow the Position Relief Checklist corresponding to the appropriate position(s) by reviewing the items marked as “**PRE-BRIEF:**”.
 - (c) Observe the position equipment, operational situation, and work environment.
 - (d) Listen to voice communications and observe operational actions.
 - (e) Observe current and pending aircraft and vehicle traffic and correlate with flight and other movement information. Indicate to the specialist being relieved that the position has been previewed and that the verbal briefing may begin.
 - (f) The relieving specialist is obligated to ask/answer any questions to gain a complete understanding of the operational situation and must ensure that the briefing is to his/her total satisfaction.
 - (g) The relieving specialist must make a statement to the specialist being relieved that position responsibility has been assumed. Phraseology: “*I have the position* (operating initials)”
 2. **The specialist being relieved:**
 - (a) Must activate the RB prior to the verbal briefing.

(b) The specialist being relieved must perform a final review of the checklist, SIAs, written notes, and other information and advise the relieving specialist of known omissions, updates, or inaccuracies.

(c) The specialist being relieved must brief the relieving specialist on the abnormal status of items not listed on the SIAs, as well as any items of special interest calling for verbal explanation or additional discussion.

(d) The specialist being relieved is obligated to ask/answer any questions to provide a complete understanding of the operational situation and must provide a complete and accurate briefing.

(e) Must deactivate the RB after the verbal briefing is complete.

(f) Must observe the position for a minimum of two (2) minutes to verify that all pertinent information has been transferred and that any conflicts have been resolved.

(g) Must record initials after this period. These requirements do not apply when de-combining positions.

Waiver. The CS/TS may, if an unusual situation warrants, waive transfer of position responsibility requirements. If a requirement is waived and an OE/OD occurs, the person waiving the requirement could be found responsible for the incident.

2-1-6 COMBINING AND DECOMBINING POSITIONS. The authority to combine/decombine positions rests with the CS (Tower) and TS (TRACON), respectively as directed in Chapter 5 of this order.

a. When combining/decombining positions, specialists must:

1. conduct a position relief briefing.
2. configure the STARS. The position(s) being closed must be combined to the appropriate position(s). Entries and MACROS to configure STARS are in the IDS.
3. configure the RDVS. This includes “call forwarding” (FWD) combined positions to the appropriate open position.
4. configure the TFDM if tower positions are combined or decombined.

b. Assigned Frequencies. Aircraft should normally be assigned preferred frequencies when positions are combined.

c. Special CRU-Art Configuration. CRU-Art must reflect the position the controller is working and not the location at which that position is being worked. If a position is being worked at a location other than where it is assigned, it must be documented on FAA Form 7230-4 (Daily Record of Facility Operation).

Example: The FNI position is being worked at the STN scope on a FedEx midnight shift. A 7230-4 entry should be made to indicate the times FNI was worked from the STN scope.

Exception: When LCE and LCW are combined, they must be combined to the LCE position log and the position will normally be worked from the LCC location. The CRU-Art computer will show the controller on the LCE position. Anytime LCE and LCW are combined and the position is worked from a location other than LCC, it must be documented on FAA Form 7230-4 (Daily Record of Facility Operation).

2-1-7 MAPS, TOWER SURFACE AREA OF RESPONSIBILITY (SAR) AND DELEGATED AIRSPACE – TRACON.

- a. **Minimum Vectoring Altitude Map (MVA).** Appendix D.
- b. **Tower Minimum Safe Altitude Warning (MSAW) Aural Alarm Geographical Boundaries.** Appendix D.
- c. **Class C Airspace.** Appendix D.
- d. **Tower Surface Area of Responsibility (SAR).** Appendix D.
- e. **Delegated Airspace – TRACON** Appendix D

2-1-8 RADAR SITE(S)/FUSED MODE AND STARS UTILIZATION.

- a. **RADAR SITE(S)/FUSED MODE.** Unless otherwise directed by CS/TS, utilize the following:
 - 1. Multiple radar sites available (INA, IND⁻², etc.):
 - (a) FUSED mode must be utilized. If ISR is displayed above an FDB, the lateral separation minima is 5 miles. If lateral separation is being utilized when ISR displays, establish some other form of approved separation as soon as feasible. This action must be timely, but taken in a reasonable fashion, using the controller's best judgment, as not to reduce safety or the integrity of the traffic situation.
 - (b) Controllers may temporarily change from FUSED mode when operationally advantageous.
 - 2. Single radar site available (INA or IND⁻², etc.):
 - (a) FUSED mode must not be utilized.
 - (b) Utilize the single available radar site.
 - 3. QWO radar site and the MULTI button on DCB must not be utilized without specific CS/TS approval.
 - 4. Controllers must immediately notify the CS/TS when temporarily changing to/from FUSED mode/single radar site.
 - 5. During OJT:
 - (a) The developmental controller must immediately notify the OJTI when temporarily changing to/from FUSED mode/single radar site.

- (b) The OJTI, when observing from another STARS display, must:
- (1) utilize the same FUSED mode/single radar site as the developmental.
 - (2) display the same or greater range.

b. STARS UTILIZATION.

1. Settings.

- (a) Specialists must monitor the STARS operational status via the SSA on an on-going basis. If a workstation/radar source fails or indicates a failure is imminent, notify the CS/TS immediately. STARS workstations operate independently. A failure at one station does not necessarily indicate failures at all workstations.
- (b) MSAW, CA and MCI functionality must not be inhibited for a workstation or facility-wide.
- (c) Aural alarm volume must be set at a minimum of 4.
- (d) Monitor code 4000.
- (e) Lower altitude filter limits must be set at "008" (800' MSL). Upper altitude filter limits must be set no lower than "153" (15,300' MSL).
- (f) Specialists must enable the display of all weather intensity levels.
- (g) The following items must be displayed in the SSA:

ITEM	FUNCTION	DCB SSA FILTER BUTTON	ITEM	FUNCTION	DCB SSA FILTER BUTTON
TCW/TDW Failure	Indicates workstation has failed or is about to fail.	Auto-displayed	Radar Source	Displays FSL/DSA status and displays radar source in use.	RADAR
System Over-load Alert	Indicates system is overloaded.	Auto-displayed	Code	Displays selected codes as special symbols.	CODES
Radar Failure Alert	Indicates radar source has failed or is about to fail.	Auto-displayed	Special Codes	Displays HJ, EM, RF, MI and SA.	SPC
Weather	Displays available weather.	WX	Airport Information	Displays IND, IND altimeter and AIA.	AIRPORT
ITEM	FUNCTION	DCB SSA FILTER BUTTON	ITEM	FUNCTION	DCB SSA FILTER BUTTON
Time and Altimeter	Displays UTC time and system altimeter.	ALTSTG	System-Wide Inhibits	Displays STARS functionality which has been disabled system-wide.	SYS OFF

ITEM	FUNCTION	DCB SSA FILTER BUTTON	ITEM	FUNCTION	DCB SSA FILTER BUTTON
ATIS	Displays ATIS code	MAIN	Work-station Inhibits	Displays STARS functionality which has been disabled at the workstation.	TW OFF
FSL/DSA STATUS	Displays Computer STATUS	STATUS	TCP OFF Indications	AHOP STATUS	OFF IND
Example of fully-functional SSA with minimum required data displayed:  1 2 3 (4) 5 (6) 2359/59 29.92 A OK/OK INA MODE S 4000 IND*29.92					

2. Transitioning to and from FSL/DSA: Controllers at each operating position must transition to DSA if FSL becomes unusable and notify the CS/TS as soon as feasible. Transferring to and from FSL/DSA is accomplished by following the STARS FSL/DSA Transition Procedure checklist in Appendix B.

2-1-9 RADAR VIDEO MAPS (RVM).

a. Specialists must display the baseline RVM for the current Facility Airspace Configuration. Baseline RVMs are:

<u>Facility Airspace Configuration</u>	<u>Baseline RVM</u>	<u>STARS Entry to Display the Baseline RVM</u>
RY23R/L	23	MAPS button, 23, enter – or selected via the DCB
RY5R/L	5	MAPS button, 5, enter – or selected via the DCB
RY32	32	MAPS button, 32, enter – or selected via the DCB
RY14	14	MAPS button, 14, enter – or selected via the DCB
TEA RY32	33	MAPS button, 33, enter – or selected via the DCB
TEA RY14	15	MAPS button, 15, enter – or selected via the DCB

b. Specialists may display optional radar maps (MVA, VFR, Airways, etc.) via STARS DCB or **STARS entry: Maps button, map #, enter.**

2-1-10 CONVERGING RUNWAY DISPLAY AID (CRDA). CRDA displays “ghost targets” for selected converging runways. STARS keyboard entries to enable a given converging runway pair and to activate “ghost target” display on the TCW/TDW may be found in the IDS.

2-1-11 MANDATORY FDB AND SCRATCHPAD DATA ENTRY.

a. Aircraft Identification and Aircraft Type. Specialists must enter the ACID (full, if known) and aircraft type in the FDB.

b. IND Arrivals. Authorized IND arrival scratchpad data is depicted in Appendix C.

1. Assigned Runway Data. The controller responsible for issuing approach information must enter assigned runway data in the FDB. Any controller who subsequently changes the assigned runway must enter the newly assigned runway data in the FDB.

2. Approach Type Data. The controller issuing the approach clearance must enter approach type data in the FDB. Any controller who subsequently changes the approach type must enter the newly assigned approach data in the FDB.

(a) Designated Arrival Runway.

(1) ATIS/Advertised Approach. No approach type data is required.

(2) Any Other Approach. Enter the approach type data in the FDB.

(b) Non-designated Arrival Runway. Enter the approach type data in the FDB.

c. Mandatory Scratchpad Data Only. Unless otherwise required, IND arrival FDB(s) must only contain data contained in Appendix C at the time of hand-off to FN and communications transfer to Tower.

2-1-12 REDUCED SEPARATION ON FINAL.

a. Unless wake turbulence separation minima must be applied, separation between aircraft may be reduced to 2.5 NM in-trail separation on the final approach course within 10 NM of runway 5R and runway 23L provided the TDW is operational and used for quick glance references and turnoff points are visible from the tower.

b. When turnoff points are not visible from the tower:

1. LC must advise FN and CS that reduced separation on final is not authorized.

2. CS must advise the TS.

3. TS must advise all TRACON specialists.

2-1-13 IND ARRIVALS TRANSFER OF COMMUNICATIONS AND CONTROL

POINTS. The IND arrivals transfer of communications and control points are the lateral confines of Area B.

ARRIVAL RUNWAY	Transfer of Communication and Control Point
Runway 5L or Runway 5R	Lateral confines of Area B
Runway 23L or Runway 23R	Lateral confines of Area B
Runway 14	Lateral confines of Area B
Runway 32	Lateral confines of Area B

2-1-14 VISUAL SEPARATION.

a. LC must provide visual separation between all arrivals to the designated arrival runway(s), provided:

1. the arrivals are within the lateral confines of Area B (or have subsequently transitioned directly into Area A), and
2. the arrivals are at or below 3,500 MSL.

NOTE: Visual separation by LC to a non-designated arrival runway(s) must be coordinated on an individual (aircraft) basis.

b. When visual separation cannot be provided as described above:

1. LC must notify FN and CS of the location (laterally and vertically) at which visual separation will be applied.
2. CS must advise the TS and FD (for input into the IDS) of the location (laterally and vertically) at which visual separation will be applied.
3. TS must advise all TRACON specialists of the location (laterally and vertically) at which visual separation will be applied.

c. When two LC are operational and parallel runways are designated arrival runways, LCE must provide the visual separation with any adjacent traffic to runway 5L/23R (stagger).

2-1-15 OPPOSITE DIRECTION OPERATIONS (ODO).

a. **Definition:** Opposite Direction Operations: IFR/VFR Operations conducted to the same or parallel runway where an aircraft is operating in a reciprocal direction of another aircraft arriving, departing or conducting an approach.

b. **Procedures for Aircraft Receiving IFR Services:**

1. **General:**

(a) ODO operations for IFR aircraft at IND⁻¹ are only authorized for aircraft receiving operational priority or when a pilot

states the ODO is **required** due to operational necessity. A simple request to land/depart opposite direction does not identify an operational necessity.

(b) These procedures are applicable only when INA radar or the ZID ARTCC radar is operational.

(c) ODO procedures in this paragraph are applicable when two aircraft will execute approaches to opposite ends of the same runway or parallel runway, or an aircraft will depart prior to an arrival on an opposite direction approach to the same runway or parallel runway. The parallel runways at IND-3 must be treated as if they were a single runway.

(d) Traffic advisories must be issued to both aircraft.

EXAMPLE:

OPPOSITE DIRECTION TRAFFIC (DISTANCE) MILE FINAL, (type aircraft).

OPPOSITE DIRECTION TRAFFIC DEPARTING RUNWAY (number), (type aircraft), (direction of flight).

OPPOSITE DIRECTION TRAFFIC (position), (type aircraft).

(e) Do not allow opposite direction same or parallel runway operations with opposing traffic inside the cutoff point unless an emergency situation exists.

(f) Use of visual separation is not authorized for aircraft receiving IFR services.

(g) A memory aid must be used by the Tower and/or TRACON controllers during ODO.

(1) TRACON Controllers must place "ODO" in the data block scratchpad of an ODO arrival aircraft (including BAK and MIE ODO arrival aircraft).

(2) LCE/LCW must display the ODO Memory Aid on the specialist's TFDM Monitor until the ODO is complete.

2. Coordination:

(a) The TS and the CS are responsible for initiating coordination required to accomplish an opposite direction arrival or departure.

(b) The TOWER must verbally request opposite direction departures with the TRACON.

(c) The TRACON must verbally request opposite direction arrivals with the TOWER.

(d) Initial coordination must be on a recorded line and must state, "Opposite Direction," and include the call sign, type and arrival or departure runway.

(e) All subsequent coordination must be on a recorded line and must state, "Opposite Direction".

3. Cutoff Point Procedures:

For aircraft receiving IFR services and conducting opposite direction same or parallel runway operations:

- (a) A departing aircraft, including an aircraft performing a touch-and-go or stop-and-go, must be airborne and issued a turn to avoid a conflict prior to an arriving aircraft reaching a point ten (10) flying miles from the threshold of the runway of intended landing. When noise abatement procedures require departures to fly to 5.5 DME or 6.5 DME off of Runway 23L or 23R before turning, departing aircraft must be airborne and turned, to avoid conflict, by the time an arrival reaches a distance of ten (10) nautical miles from the turn point.
- (b) An aircraft performing a go-around, low approach or missed approach must be issued a turn to avoid conflict prior to an arriving aircraft reaching a point ten (10) flying miles from the threshold of the runway of intended landing.
- (c) An arriving aircraft must cross the runway threshold prior to a subsequent arriving aircraft reaching a point ten (10) flying miles from the threshold of the runway of intended landing.
- (d) 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.

c. Responsibilities:

- 1. The radar controller and the LCE/LCW controllers share the responsibilities to coordinate ODO and issue traffic advisories as prescribed in this agreement.
- 2. During ODO operations, the radar controller is responsible for:
 - (a) ensuring that arrival aircraft do not pass the designated cutoff point until an opposite direction departure is airborne and has been turned to avoid a conflict.
 - (b) ensuring that an opposite direction arrival aircraft does not pass the designated cutoff point until a departure is airborne and has been turned to avoid a conflict.
 - (c) ensuring that subsequent arrival aircraft do not pass the designated cutoff point until an opposite direction arrival has crossed the landing threshold.
- 3. During ODO operations, the local controller is responsible for coordinating and issuing a turn to avoid a conflict for aircraft that are executing a go-around, low approach or missed approach prior to an arrival aircraft reaching the designated cutoff point.
- 4. If the tower TDW is out of service, the radar controller will be responsible to ensure all cutoff points are met.
- 5. 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.

d. Procedures for VFR/VFR and VFR/IFR Operations:

1. All ODO coordination must comply with para: **2-1-15 b. 2.** of this order.
2. Traffic advisories must be issued to both aircraft.

EXAMPLE:

OPPOSITE DIRECTION TRAFFIC (DISTANCE) MILE FINAL, (type aircraft).

OPPOSITE DIRECTION TRAFFIC DEPARTING RUNWAY (number), (type aircraft), (direction of flight).

OPPOSITE DIRECTION TRAFFIC (position), (type aircraft).

3. A memory aid must be used by the Tower and/or TRACON controllers during ODO.
 - (a) TRACON Controllers must place "ODO" in the data block scratchpad of an ODO arrival aircraft (including BAK and MIE ODO arrival aircraft).
 - (b) LCE/LCW must display the ODO Memory Aid on the specialist's TFDM Monitor until the ODO is complete.
4. Ensure that VFR aircraft are issued a turn to avoid conflict with opposing IFR/VFR traffic.

2-1-16 COORDINATION.**a. Tower**

1. All verbal coordination between LC and GC involving the crossing of an active runway or transfer of control of a runway must be accomplished via the recorded landlines. All other coordination should be accomplished via the recorded landlines.
2. Only when one (1) GC and one (1) LC position is open, abbreviated coordination between the two positions is authorized in accordance with FAAO 7110.65, as follows:

- (a) Position identification may be omitted.
- (b) Operating initials may be omitted except for LC acknowledging the completed crossing.

Example: GC: "Cross Runway 23L @ D3"

LC: "Cross Runway 23L @ D3"

GC: "Runway 23L crossing complete"

LC: "LO"

b. Tower to TRACON.

1. Notify TS when the Tower TDW is unusable for silent coordination of inbound sequence of IND arrivals.

2. The tower will use a nonverbal rolling/boundary notification for departure aircraft by generating a flight progress strip in the TRACON utilizing the "PRINT" function of TFDM.

c. TRACON to Tower.

1. Unless notified by the Tower the TDW is unusable for silent coordination of inbound sequence of IND arrivals, the inbound sequence to the designated IND arrival runway will be considered forwarded when the STARS FSL is operational.
2. When notified that the Tower TDW is unusable for silent coordination of inbound sequence of IND arrivals, provide the Tower with an inbound sequence prior to transfer of communications.
3. All mandatory IND arrival scratchpad data entries contained in Appendix C must be completed prior to communications transfer to the Tower.

2-1-17 QUICKLOOK. LC must quicklook all DR, FR and FN positions.

2-1-18 SINGLE PERSON MIDNIGHT OPERATIONS. Single person midnight operations are defined as periods when an operational area is operated with one ATCS between the hours of 0000 LCL and 0500 LCL.

2-1-19 INTRA-FACILITY HAND-OFF AND AUTOMATED POINT-OUT PROCEDURES.

- a. **Initiating Controller Responsibilities.** The initiating controller must enter applicable, accurate and authorized data in the FDB scratchpad prior to an automated PO. Any data in the FDB scratchpad at the time of an intra-facility HO must be accurate and authorized (HO to FN are subject to additional restrictions).

HO AND AUTOMATED PO FDB SCRATCHPAD DATA	STARS KEYBOARD ENTRY	MEANING	
"E##"	None Required Data automatically displays with auto- acquisition.	AOA 110	HO to ZID-MIE and requested altitude.
		AOB 100	HO to FWA or CMH (as appropriate) and requested altitude.
"D##"	None Required Data automatically displays with auto- acquisition.	AOA 140	HO to ZID-SHB and requested altitude.
		AOB 130	HO to ZID-ABB and requested altitude.
"P##"	None Required Data automatically displays with auto- acquisition.	AOA 110	HO to ZID-HUF and requested altitude.
		AOB 100	HO to HUF and requested altitude.
"W##"	None Required Data automatically displays with auto- acquisition.	AOA 110	HO to ZID-HUF and requested altitude.
		AOB 100	HO to HUF and requested altitude.

HO AND AUTOMATED PO FDB SCRATCHPAD DATA	STARS KEYBOARD ENTRY	MEANING	HO AND AUTOMATED PO FDB SCRATCHPAD DATA
"B##"	None Required Data automatically displays with auto-acquisition.	AOA 110	HO to ZAU-DNV and requested altitude. (SACHS Gate)
		AOB 100	HO to GUS and requested altitude.
"K##"	None Required Data automatically displays with auto-acquisition.	AOA 110	HO to ZAU-OKK and requested altitude. (CLLRK Gate)
		AOB 100	HO to GUS and requested altitude.
"N##"	None Required Data automatically displays with auto-acquisition.	AOA 110	HO to ZAU-OKK and requested altitude. (BRATN Gate)
		AOB 100	HO to GUS and requested altitude.
"H##"	None Required Data automatically displays with auto-acquisition.	AOA 140	HO to ZID-SHB and requested altitude.
		AOB 130	HO to CVG and requested altitude.
"S##"	None Required Data automatically displays with auto-acquisition.	AOA 140	HO to ZID-SHB and requested altitude.
		AOB 130	HO to ZID-ABB and requested altitude.
3-Character ID	"ABC", slew, enter	Destination or fix along route of flight.	
"##H"	"##H", slew, enter	Indicates the first two digits of aircraft's assigned or present heading.	
"FAF"	"FAF", slew, enter	Final approach fix for IND arrival runway.	
"V##"	"V##", slew, enter	Aircraft routed via Victor airway V##.	
"DV8"	"DV8", slew, enter	Aircraft is deviating for weather. No specific heading will be assigned.	
"A####" below FDB	"+, ####", slew, enter	Authorized climbing/descending altitude, pending acceptance of PO/HO by the receiving controller. The data must be removed when the aircraft completes the climb/descent.	
Removes "A####" below FDB.	"+, 000" (removes climbing or descend-altitude), slew, enter		

HO AND AUTOMATED PO FDB SCRATCHPAD DATA	STARS KEYBOARD ENTRY	MEANING
"PAJ"	"PAJ", slew, enter	Aircraft conducting parachute jumping.
"PIX"	"PIX", slew, enter	Aircraft conducting photography mission. No specific heading will be assigned.
Helicopter Use Only.	"STF"	"STF", slew, enter
	"STV"	"STV", slew, enter
	"DTN"	"DTN", slew, enter

b. Receiving Controller Responsibilities. The receiving controller must, via automation:

1. approve the PO. If approved, the initiating controller has control for additional +/- 20° turns without additional coordination.
2. disapprove the PO.
3. accept a HO, if appropriate.

ACTION	STARS KEYBOARD ENTRY
Approve PO	Slew, enter
Disapprove PO	"UN", slew, enter
Accept HO from automated PO	"***", slew, enter
Accept HO	Slew, enter

2-1-20 PRACTICE APPROACHES AND SEPARATION SERVICES.

- IND practice approaches should be coordinated with all affected controllers at least ten (10) NM from the runway.
- IFR separation to VFR aircraft practicing an instrument approach must be provided at IND. Unless additional wake turbulence separation is required, 500 feet vertical may be applied between VFR aircraft and between a VFR and an IFR aircraft.
- IFR separation to VFR aircraft practicing an instrument approach at satellite airports must be provided in accordance with the applicable Letter to Airmen.
- VFR aircraft practicing instrument approaches must have a "P" placed in the Flight Rules (Field 5) section of the data block by typing "Mult Func, H, ., P, slew, enter".

2-1-21 SPECIAL HELICOPTER TRANSPONDER CODE ASSIGNMENTS.

- Several local helicopter operators have been assigned discrete transponder codes via LOA. These helicopters will STARS auto-acquire as N13TV, N6TV, etc. and will be associated with the "T" STARS TCP.

- b. Several local helicopter operators are authorized to squawk transponder code 0377 via LOA when operating in the IND outer area without radar service. These helicopters will not STARS auto-acquire.
- c. Transponder code assignments of 1255 - 1267 will STARS auto-acquire as "H55" through "H67" respectively with "HELO" as the aircraft type and will be associated with the "T" STARS TCP. This process is typically utilized for helicopter operations on Race days and associated events.

2-1-22 FIXED-WING SVFR. Fixed-wing SVFR is not authorized within IND Class C Airspace.

2-1-23 PIREPS.

- a. **CS/TS Responsibilities.** Review PIREPS and take action to disseminate as appropriate.
 - 1. CS: When notified by FD that weather conditions warrant PIREP solicitation, coordinate with the TS to solicit for PIREP(s). Notify FD when the TS advises forecast conditions warrant PIREP solicitation.
 - 2. TS: When notified by AD that forecast conditions warrant PIREP solicitation, advise and coordinate with the CS to solicit for PIREP(s).
 - 3. CS/TS: After coordination, determine which operational position must obtain the most relevant PIREP at least once an hour. A direct assignment for a PIREP will then be made to the chosen position.
 - (a) Disseminate PIREP information via the AIS-R System or Direct FD and/or AD to disseminate PIREP information.
- b. **Specialists' Responsibilities.**
 - 1. When directed by the CS/TS, specialists must solicit a PIREP and forward the PIREP to CS or TS.
 - 2. When a PIREP is received that meets solicitation criteria and weather/forecast conditions do not otherwise require solicitation, forward the PIREP to CS or TS.

2-1-24 NOTAMS.

- a. **CS/TS Responsibilities.** Review NOTAMS and take action to disseminate as appropriate.
 - 1. CS: Direct FD to disseminate and input into the IDS as appropriate.
 - 2. TS: Direct AD to disseminate and input into the IDS as appropriate.
- b. **FD/AD Responsibilities.**
 - 1. FD: Forward incoming NOTAM information to CS. Disseminate and input into the IDS as directed.
 - 2. AD: Forward incoming NOTAM information to TS. Disseminate and input into the IDS as directed.

c. NOTAM System Outage. When notified by Indianapolis Air Route Traffic Control Center (ZID) of a NOTAM System outage:

(1) TS and CS must open the Candidate NOTAM System webpage in their respective operating quarters and ensure it is readily accessible for the effective and efficient retrieval of NOTAMs.

(2) FD and AD must monitor the Candidate NOTAM System webpage for new or cancelled NOTAMs during the outage.

NOTE –

The Candidate NOTAM System will only provide NOTAM information that is obtained during the NOTAM outage. The Federal NOTAM System website must be used in addition to the Candidate NOTAM System webpage for the most accurate NOTAM information during the NOTAM outage.

2-1-25 SIGMETS, AIRMETS, WST, UUA, CWA AND OTHER KNOWN OR OBSERVED WEATHER THAT MAY AFFECT AIRCRAFT SAFETY.

a. TS/CS Responsibilities.

1. Review all SIGMETS, AIRMETS, WST, UUA, CWA and other known or observed weather that may affect aircraft safety and determine the need for dissemination and/or broadcast.

2. When it is determined the advisory is appropriate for broadcast, the TS/CS will ensure the strip is forwarded to each position.

3. After broadcast, ensure the controller writes their operating initials on the strip.

4. After verifying all broadcasts have been made, the TS/CS will file the strip with hourly traffic.

b. FD/AD Responsibilities.

1. FD: Forward SIGMETS, AIRMETS, WST, UUA and CWA information to CS for review and disseminate as directed.

2. AD: Forward SIGMETS, AIRMETS, WST, UUA and CWA information to the TS for review. Disseminate and/or forward to satellite control towers as directed.

2-1-26 CONTROLLED AREA INTRUSIONS. When a possible airspace intrusion has occurred specialists must:

a. immediately notify the CS/TS.

b. manually initiate a STARS track using "VLTR##" (## = Minutes past the hour).

c. indicate any known altitude information in the FDB, if not displayed.

d. create a FPS/EFS including ACID ("VLTR##") and any additional information.

e. manually hand-off the track to adjacent positions or facilities.

2-1-27 TRAFFIC MANAGEMENT. Do not amend TMU initiatives on aircraft involved in traffic management programs without prior coordination with ZAU or ZID TMU.

2-1-28 AIR DEFENSE IDENTIFICATION ZONE (ADIZ). When directed by the TS, ADIZ security services will be conducted at the "A" TCW and must utilize 120.52.

2-1-29 ENHANCED ARTCC DIRECT ACCESS RADAR CHANNEL (EDARC). When notified of DARC, all inter-facility automation ceases. All flight plans and all handoffs must be completed manually.

2-1-30 TRACAB OPERATIONS.

- a.** TRACAB operations must only be conducted during midnight shift periods unless circumstances require that TRACAB operations be utilized in conjunction with facility's ATC LIMITED Operational Contingency Level. Anytime non-mid-watch TRACAB operations are utilized, the ATM must be notified.
- b.** Positions will remain open and only be combined as traffic warrants. If combined, as volume increases the positions will be de-combined.
- c.** Positions will not be combined to one position prior to midnight local or 90 minutes after the start of the shift (i.e., If shift begins at midnight, positions will remain open until 01:30am), whichever is later.
- d.** The TRACON must be opened at least 15 minutes prior to the scheduled start time of the first day shift employee.

2-1-31 WAKE TURBULENCE SEPARATION STANDARD. Indianapolis ATCT is authorized the use of Consolidated Wake Turbulence (CWT), procedures and separation minima contained in FAA JO 7110.126.

2-1-32 OPERATIONAL RISK MANAGEMENT (ORM).

- a.** Operational Risk Management includes the use of the Operational Risk Management Plan (ORMP) and the Principles of ORM, as detailed in FAA JO 7210.3,. The ORMP is the formal document used for review and approve a planned Technical Operations (Tech Ops) project that meets the requirements of ORM. This document includes the plan for air traffic control (ATC) to protect continuity of service. Coordination with Tech Ops must take place for any projected planned maintenance tasks that may impact ATC.
- b.** The ORMP and the Principles of ORM must be used in conjunction with local procedures to support the completion of formal ORM maintenance activities and projects.
- c.** Certain maintenance tasks that do not meet the criteria identified in subparagraph a. may still have the potential for operational consequences locally. Air Traffic and Tech Ops should jointly identify these additional maintenance activities that will require an ORMP.

d. The Air Traffic Manager (ATM) has identified the following Air Traffic positions that are authorized to review and approve ORMPs for IND ATCT. These positions may also serve as the Air Traffic Point of Contact (POC) for any ORM project:

1. Air Traffic Manager
2. Support Manager(s)
3. Operations Manager
4. Designated NATCA Representative.

e. When any facility reviewer is initially made aware of a formal ORMP project by Tech Ops, they will email the other reviewers and approvers to create an ORMP team for the project. One of the reviewers/approvers will be designated as the POC for the project by the ATM.

f. For those projects that do not meet the criteria for a formal ORMP but may still affect the facility's ability to provide air traffic services, the Air Traffic and Tech Ops personnel will meet, virtually or in person, at an agreed upon time to discuss the ORM issues with these projects. Principles of ORM must be considered when discussing non-ORMP projects.

2-1-33 FACILITY AIRSPACE CONFIGURATION. The Facility Airspace Configuration is determined by the Designated Arrival Runway(s). If multiple runways are Designated Arrival Runways (e.g. RY 5L & RY 32), the Facility Airspace Configuration will be aligned with the parallel runway(s) that is a Designated Arrival Runway. The Facility Airspace Configuration will be displayed in the Airspace Configuration box in the IDS.

2-1-34 DESIGNATED ARRIVAL AND DEPARTURE RUNWAYS. The runways that are selected as the Designated Arrival Runway(s) and Designated Departure Runway(s) will be broadcast on the ATIS and identified in the Designated Runways / Airspace Configuration boxes in the IDS. Any runways not broadcast on the ATIS and listed in the Designated Runways boxes in the IDS will be considered "NON-DESIGNATED" runways.

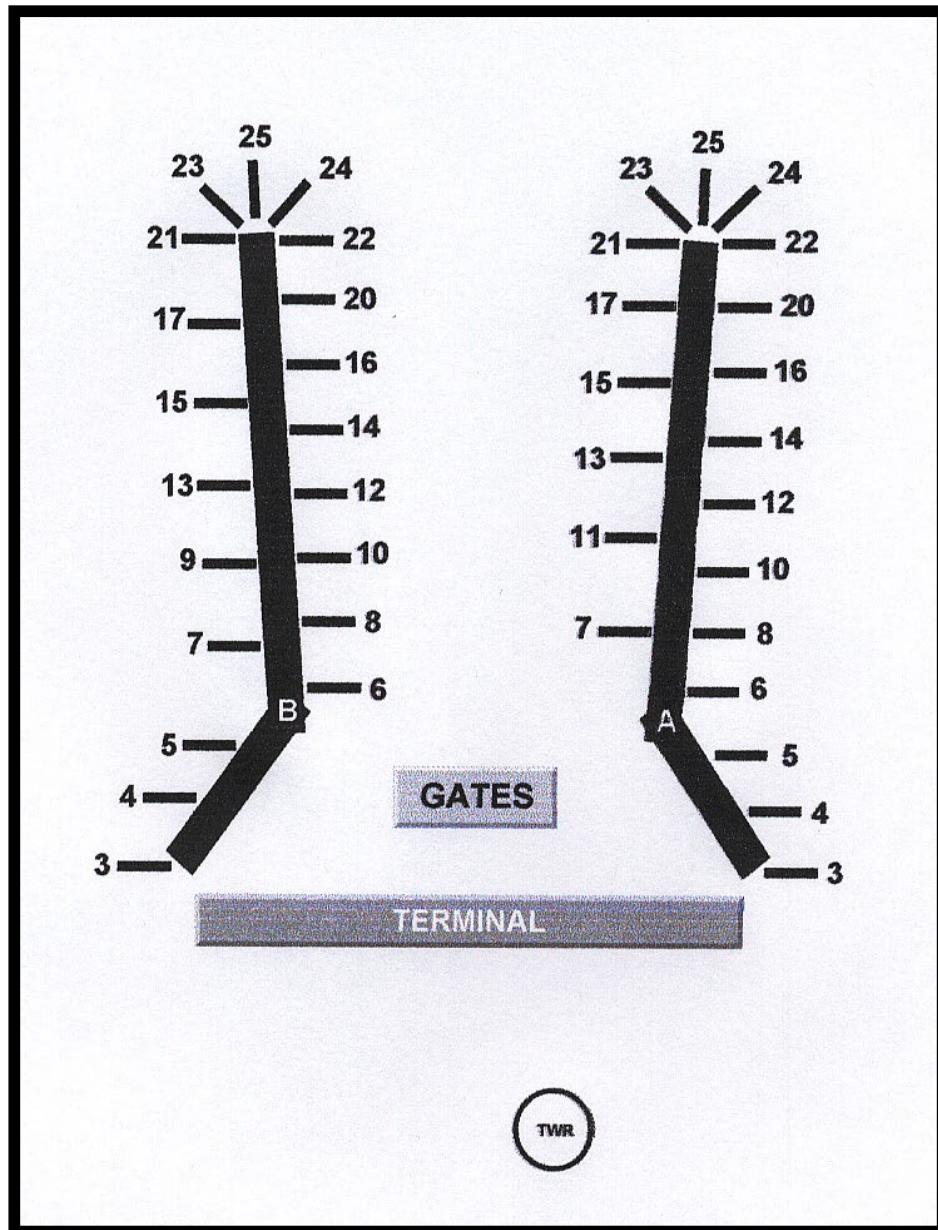
RWY 23R/L			
APCH	RWY	DESIGNATION	REMARKS
I	23L	IN/OUT PROVIDING	
I	23R	IN/OUT PROVIDING	
	14/32	OPEN NOT PROVIDING	

IDS Designated Runways/Airspace Configuration/ATIS Advertised Approach Boxes

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(PAGE 60 - 68)**

3-1-2 TERMINAL GATE LAYOUT.

a. Depiction.



b. Airline Gate Assignments. Specific airline gate assignments are not depicted due to the frequency in which the assignments change. Current airline gate assignments are depicted in the IDS.

3-1-3 NON-MOVEMENT AREAS.

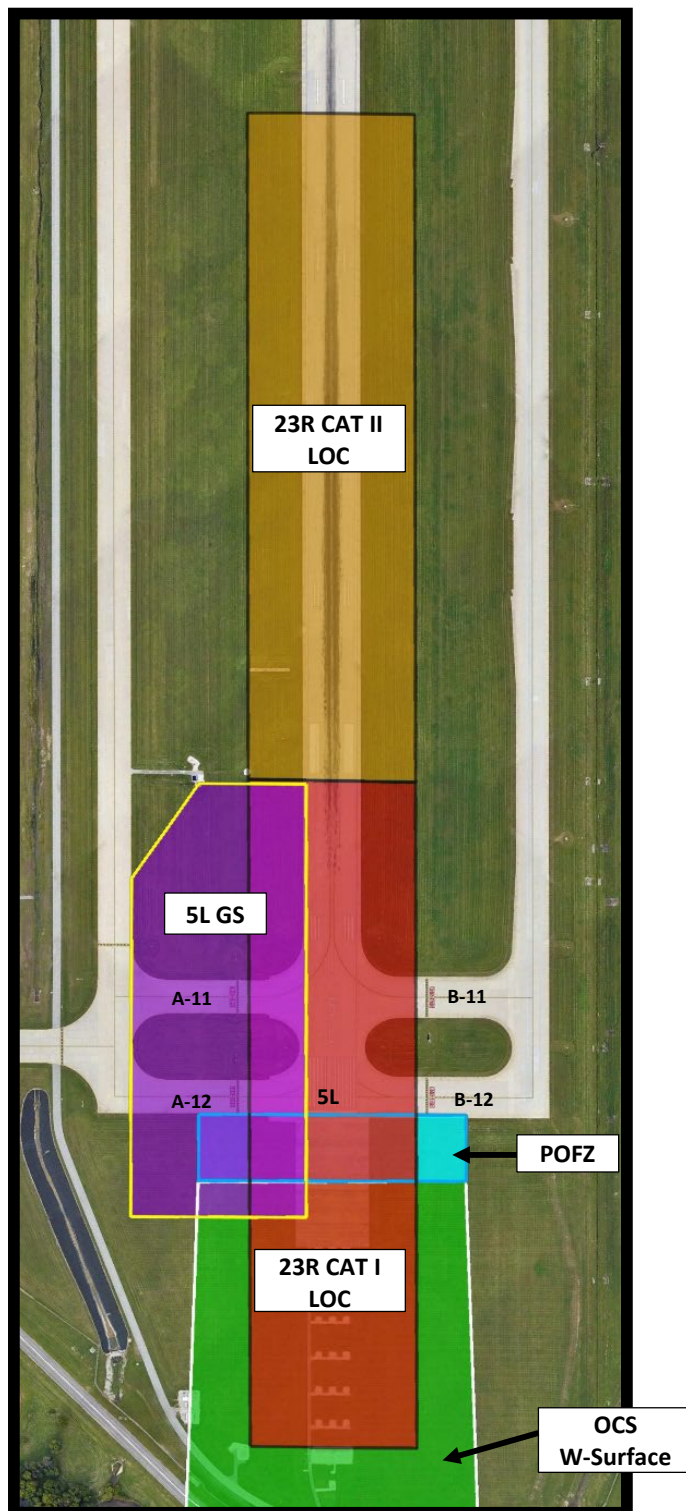
a. Ramp Areas. All ramp areas (including the terminal ramp and the GRE) are non-movement areas.

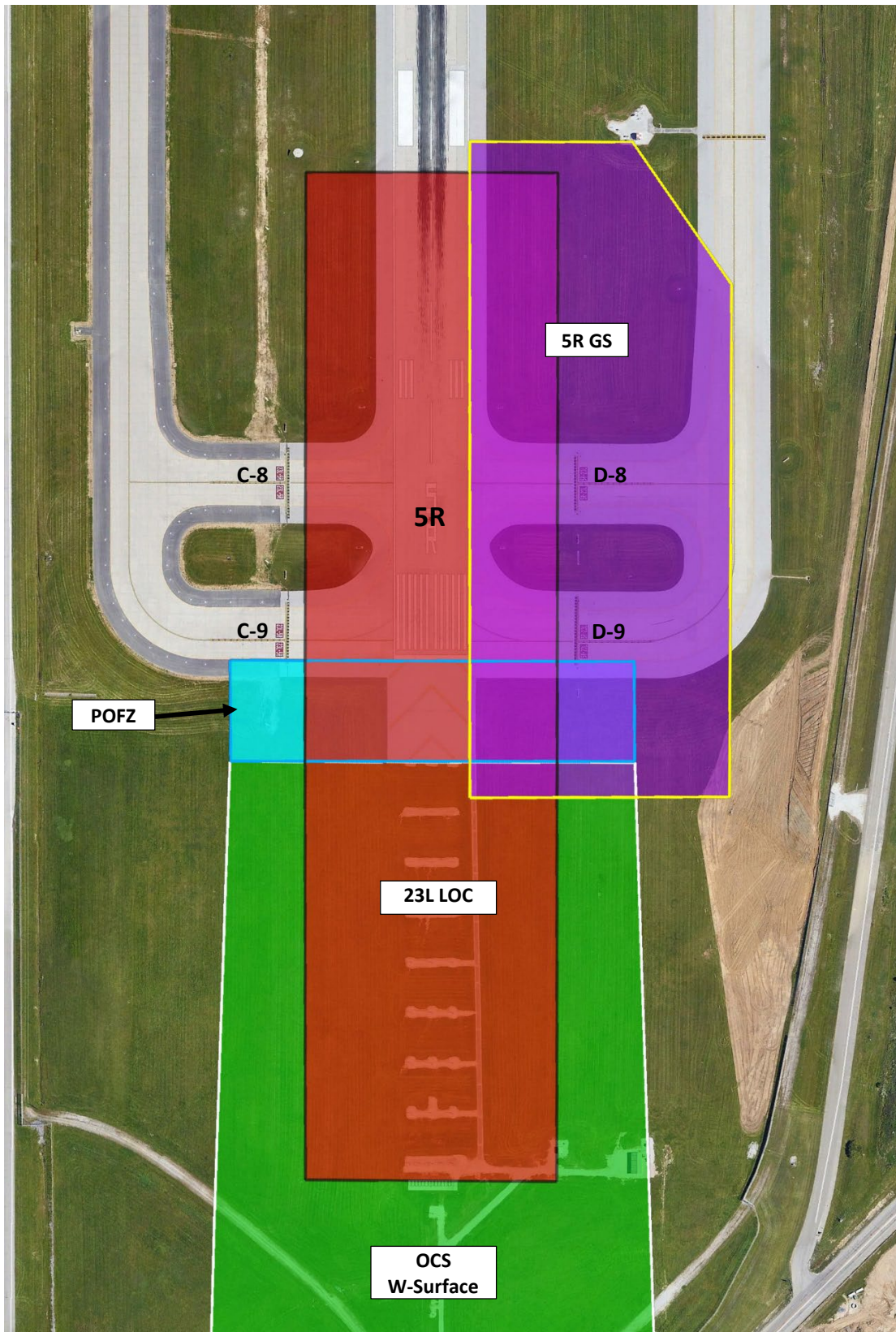
- b. Pad Areas.** The pads located on taxiway J and taxiway P are non-movement areas.
- c. Taxi lane Victor.** Taxi lane Victor is a non-movement area.
- d. Taxiway November/FDX Ramp.** The LOA between IND and IAA depicts taxiway N between taxiway D and taxiway N-3 (adjacent to FDX ramp) as a non-movement area during specific time periods. Refer to the current LOA for additional information.
- e. Taxiway Crossings.** The LOA between IND and IAA identifies service road and taxiway intersections where vehicles may cross a movement area without specific approval from IND ATCT. These intersections are listed below and are depicted with “||” or “==” on the Airport and Equipment Diagram. Refer to the current LOA for additional information.

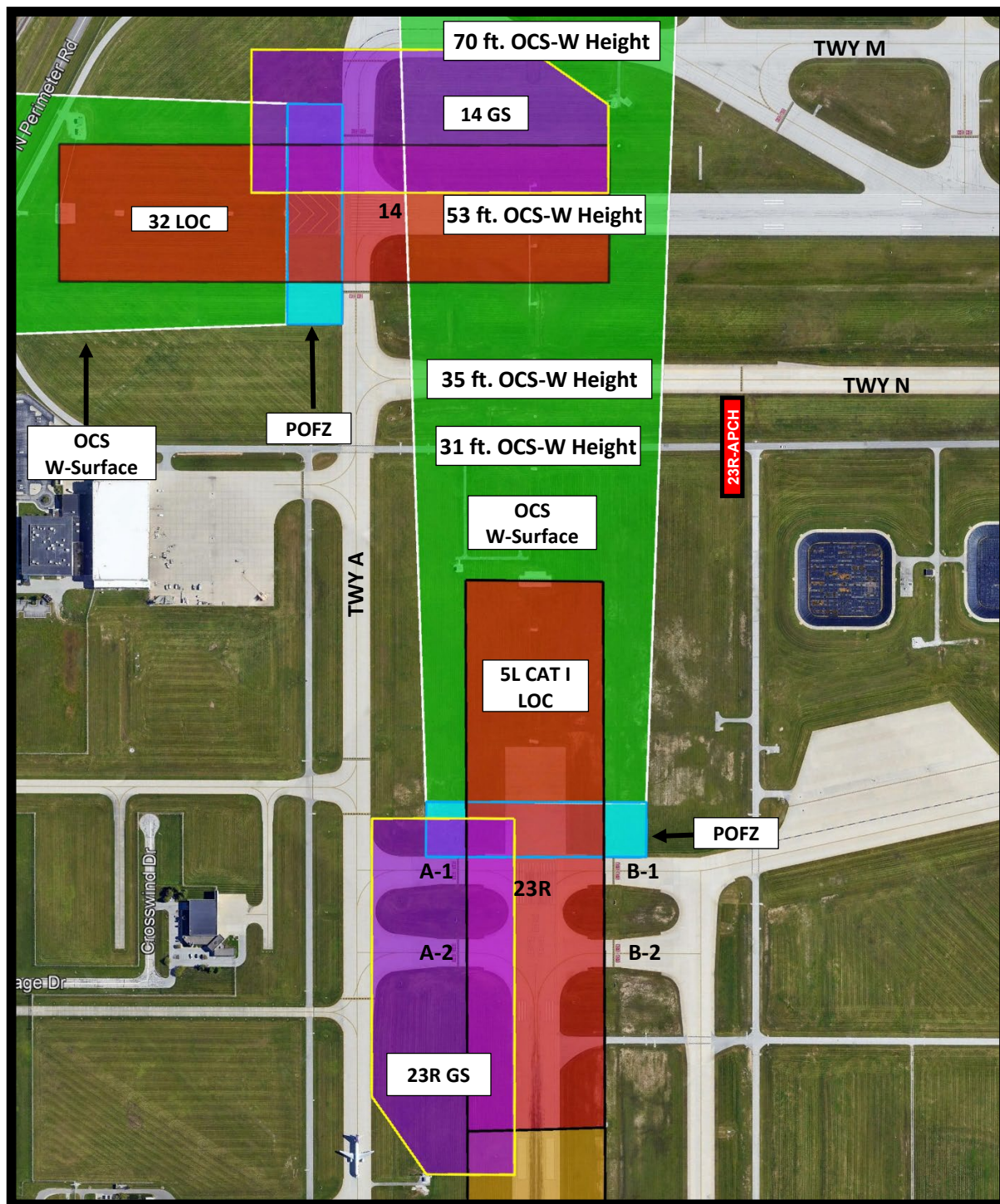
1. SERVICE ROAD CROSSING D T/W.
2. SERVICE ROAD CROSSING J T/W.
3. SERVICE ROAD CROSSING H T/W.
4. SERVICE ROAD CROSSING P T/W.
6. FOXTROT LANE CROSSING H T/W.
7. NW SERVICE ROAD CROSSING R T/W.
8. SE SERVICE ROAD CROSSING R T/W.
9. SERVICE ROAD CROSSING P T/W.
11. SERVICE ROAD CROSSING A T/W.
12. SERVICE ROAD CROSSING H T/W.
13. OLD TERMINAL RAMP ACCESS TO REMOTE4.
14. SERVICE ROAD CROSSING P T/W.
17. FOXTROT LANE CROSSING B T/W.
18. SERVICE ROAD CROSSING G T/W.

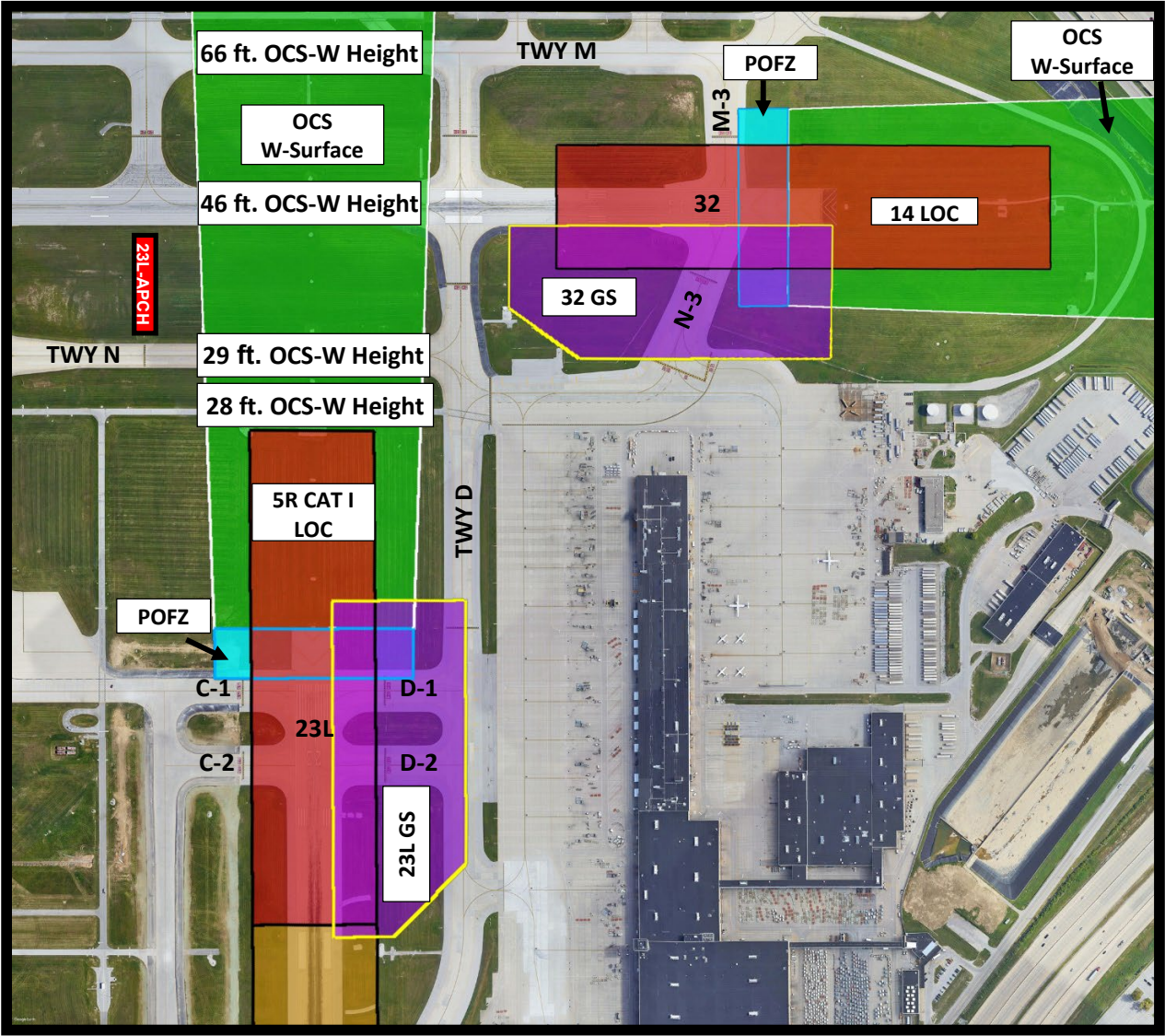
3-1-4 ILS CRITICAL AREAS PRECISION OBSTACLE FREE ZONES AND FINAL APPROACH OBSTACLE CLEARANCE SURFACES

a. Depictions.

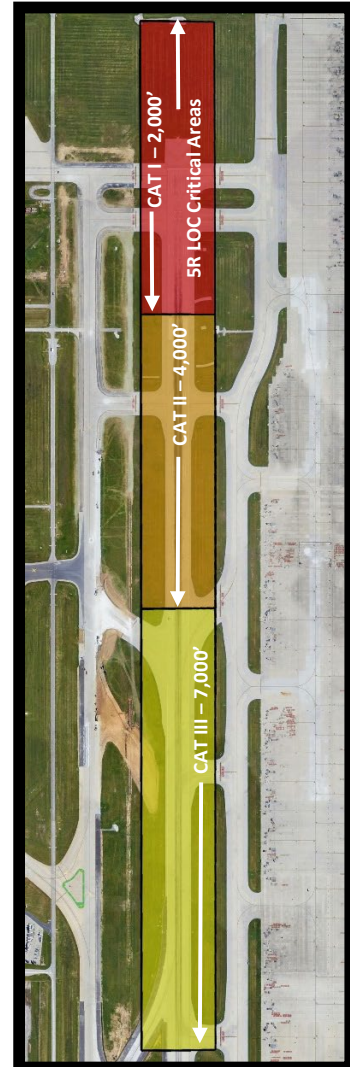
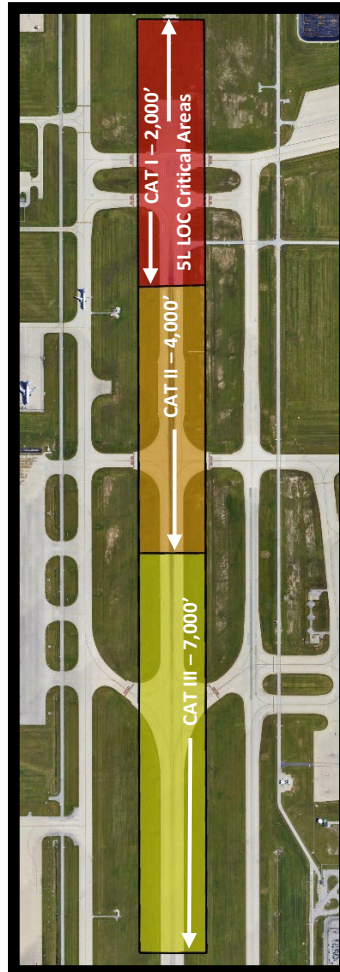
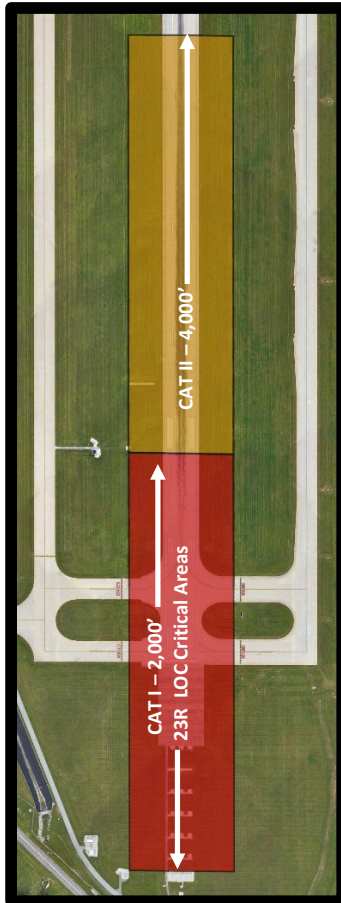








CAT II and CAT III Localizer Critical Areas



b. Descriptions.

1. ILS Critical Areas.

(a) Localizer Critical Areas. CAT I localizer critical areas are 2,000 feet in length. CAT II localizer critical areas are 4,000 feet in length. CAT III localizer critical areas are 7,000 feet in length.

(b) Glideslope Critical Areas.

(1) RY 5L: Affected by movement on taxiway A-11 and taxiway A-12. Aircraft may taxi full length on taxiway Alpha without interference.

(2) RY 5R: Affected by movement on taxiway Delta from approximately 1,000 feet northeast of taxiway D-8, to and including taxiway D-8 and taxiway D-9.

(3) RY 23R: Affected by movement on taxiway A-1 and taxiway A-2. Aircraft may taxi full length on taxiway Alpha without interference.

(4) RY 23L: Affected by movement on taxiway Delta from approximately 250 feet southwest of FEDEX Point 3 northeast to approximately 400 feet northeast of taxiway D-1, including taxiway D-1 and taxiway D-2. Aircraft movement and holding is authorized on taxiway C, C-1, C-2, and runway 23L.

(5) RY 14: Affected by movement on taxiway Alpha northeast of runway 14. Affected by movement on taxiway Mike northwest of taxiway M-1.

(6) RY 32: Affected by movement on taxiway N-3. Aircraft may taxi full length on taxiway November without interference.

**GS Critical Area
Signage Example:**



2. Precision Obstacle Free Zone (POFZ). The POFZ is defined as an area beginning at the runway threshold, at the runway threshold elevation, and centered on the extended runway centerline, 200 feet long by 800 feet wide.

3. Final Approach Obstacle Clearance Surfaces (OCS). An OCS is comprised of three components (W, X and Y surfaces). The OCS(s) for runway 5L, runway 5R, runway 14 and runway 32 are not impacted by any service roads, taxiways or runways. Only the W-Surface of the OCS(s) for runway 23L and runway 23R is impacted by service roads, taxiway November, runway 14/32 and taxiway Mike. Aircraft restricted by the OCS(s) are listed in the IDS.

(a) Runway 23R OCS (W-Surface) is affected by obstructions exceeding the following heights (AGL) on:

(1) **Service road Southwest of taxiway November: 31 feet.** IAA and the FAA do not operate any vehicles that exceed the height.

(2) **Taxiway November: 35 feet.** Aircraft may taxi on taxiway Alpha without affecting the OCS. The OCS is protected by holding aircraft southeast of the "23R-APCH" signage (**23R-APCH**) on taxiway November.

(3) **Runway 14/32: 53 feet.** Aircraft may taxi on taxiway Alpha without affecting the OCS. The OCS is protected by holding aircraft southeast of taxiway M-1 on runway 14/32

(4) **Taxiway Mike: 70 feet.** Aircraft may taxi on taxiway Alpha without affecting the OCS. The OCS is protected by holding aircraft southeast of taxiway M-1 on taxiway Mike.

(b) Runway 23L OCS (W-Surface) is affected by obstructions exceeding the following heights (AGL) on:

(1) **Service road Southwest of taxiway November: 28 feet.** IAA and the FAA do not operate any vehicles that exceed the height.

(2) **Taxiway November: 29 feet.** Aircraft may taxi on taxiway Delta without affecting the OCS. The OCS is protected by holding aircraft northwest of the "23L-APCH" signage (**23L-APCH**) on taxiway November.

(3) **Runway 14/32: 46 feet.** Aircraft may taxi on taxiway Delta without affecting the OCS. The OCS is protected by holding aircraft northwest of taxiway M-2 on runway 14/32.

(4) **Taxiway Mike: 66 feet.** Aircraft may taxi on taxiway Delta without affecting the OCS. The OCS is protected by holding aircraft northwest of taxiway M-2 on taxiway Mike.

3-1-5 ACTIVE AND INACTIVE RUNWAYS.

a. **Active Runway.** LC must be "in control" of any active runway(s). The following runway(s) are active:

1. Any designated departure runway.
2. Any designated arrival runway.
3. A non-designated runway after GC relinquishes "control" of the runway to LC.

b. **Inactive Runway.** GC must be "in control" of any inactive runway(s). An active runway becomes inactive after LC relinquishes "control" of the runway to GC.

3-1-6 MANDATORY MEMORY AIDS. Runway memory aids must be displayed in clear view on the TFDM monitor of the position that has "control" of the runway. When "control" of a runway is changed to another position, the mandatory memory aid indicating control of the runway must be updated on the TFDM displays.

a. **Green Runway Memory Aids** Must be displayed:

1. At the Ground Control position when the runway is available for aircraft, vehicle and personnel operations.
2. At LCE/LCW when the runway is available for aircraft operations.

- b. Red Runway Memory Aids** must be displayed:
 - 1. At the GC position when the runway is closed or otherwise unavailable for use.
 - 2. At LCE/LCW position when the runway is temporarily occupied with other than aircraft operations (e.g. a runway inspection).
- c. Runway Crossing Memory Aid** – When a runway crossing has been approved on an active runway, the LC responsible for the runway must use the TFDM Flip Strip function to flip over the first EFS in the departure bay for the runway being crossed. If there are no EFSs in the departure bay, the Red Runway Memory Aid must be displayed on the TFDM Monitor.
- d. Runway Closed Memory Aids** must be displayed at LCE/LCW when a runway is closed.
- e. ODO Memory Aid** must be displayed when an Opposite Direction Operation (ODO) has been approved. Remove the memory aid when the ODO is complete.
- f. LUAW Memory Aids**
 - 1. The yellow LUAW Memory Aid must be displayed when LUAW operations are not in effect.
 - 2. LC must select the “LUAW” next logical function TFDM button when an aircraft acknowledges their LUAW instruction. If TFDM is out of service, the FPS of an aircraft that accepts a LUAW clearance must be canted.
- g. Non-Designated Runway Arrival Memory Aid** must be displayed when a Non-Designated Runway Arrival has been approved. Remove the memory aid when the arrival has landed.
- h. Landing Clearance Memory Aid** - LC must select the TFDM “CTL” next logical function button when an aircraft acknowledges their landing clearance. If TFDM is out of service, a notepad must be used to record acknowledgment of the landing clearance.
- i. EYE Memory Aid** must be displayed when “Block Eagle Creek or “Block Eagle Creek runway 3” is coordinated. Remove the memory aid when “Cancel Eagle Creek block” is coordinated.
- j. 2R2 Memory Aid** must be displayed when “Block 2R2” is coordinated. Remove the memory aid when “Cancel 2R2 block” is coordinated.

3-1-7 RUNWAY, TAXIWAY, TAXI LANE AND MISCELLANEOUS RESTRICTIONS.**a. Runway Restrictions**

1. Turbojet and aircraft weighing more than 12,500 lbs. are not permitted to make intersection departures on runway 32.
2. Aircraft cannot clear runway 5R/23L at taxiways D-3, D-4, D-5 and D-6 and hold short of taxiway Delta. GC must give way to aircraft exiting runway 5R/23L at taxiways D-3, D-4, D-5 and D-6.

b. Taxiway and Taxi lane Restrictions. Aircraft group restrictions are determined by wingspan and tail height (physical characteristics) and are defined in AC-150/5300. Aircraft restricted due to group classification are listed in the IDS.

1. Group 5 and group 6 aircraft are subject to the following restrictions:
 - (a) are not authorized on the taxi lanes between Concourse A and Concourse B.
 - (b) are not authorized on taxiway November between taxiway Delta and taxiway N-3 (adjacent to FDX ramp). This restriction also applies during periods when taxiway November between taxiway Delta and taxiway N-3 is considered a non-movement area by IAA LOA.
 - (c) are not authorized on taxiway Golf.
2. Group 6 aircraft are permitted to enter the terminal ramp area only with specific authorization from the on-duty IAA Operations Manager.

c. Miscellaneous Restrictions.

1. Larger aircraft should enter the Signature ramp at the southeast entrance.
2. Helicopters are restricted from flying directly over the terminal.
3. Special Boeing 747-800 restrictions (runway, taxiway, holding and terminal gate usage) are depicted in the IDS.

3-1-8 SPECIAL USE RAMP AREAS.

- a. **Hazardous Cargo.** IAB Ramp.
- b. **Bomb Threat.** Taxiway Papa pad
- c. **Run-up.** The GRE is the primary run-up area. Additional run-up areas, if necessary, must be designated by the on-duty IAA Operations Manager. Aircraft utilizing a taxiway as an additional run-up area must be advised to align with the taxiway to avoid damage to fencing, service road traffic, etc.
- d. **De-icing.** Approved de-icing areas change yearly and are published in the IAA yearly de-icing plan. Aircraft operators are responsible to conduct de-icing in an IAA approved location. Detailed information is contained in the IND

Airport De-icing Plan located in the IND Facility Equipment/SOP Supplement Binder. Any questions should be directed to the on-duty IAA Operations Manager.

3-1-9 MANDATORY PHRASEOLOGY. Notify appropriate controller when coordinated runway operation is complete. *Phraseology: "Runway ##, your control" or "Runway ## crossing complete."*

3-1-10 ELECTRONIC FLIGHT STRIP (EFS) AND NOTEPAD USE.

- a. IND Arrivals.** EFS via TFDM must be used for IND arrivals. LC must select the "CTL" next logical function button when an aircraft acknowledges their landing clearance. Notepad use at LC is mandatory for IND arrival traffic if TFDM is out of service. When TFDM is out of service, LC must record on the notepad the arrival aircraft call sign and place a checkmark next to the call sign when the aircraft acknowledges the landing clearance. Notepad use at GC is mandatory when TFDM and the TDW is out of service.
- b. Helicopters.** EFS are not required for overflight helicopter operations when the TDW is operational. EFS use is mandatory for helicopter arrivals and departures at IND.
- c. Retention.** If paper FPS are used, all strips are to be bundled and placed on the back center counter at the end each day (0000L),. Each bundle must be clearly labeled with the day's date.

3-1-11 TOWER EXPANDED AIRSPACE OPERATION (TEA). This operation allows for increased safety and efficiency by designating an arrival runway that differs from the designated departure runway when one of the parallel runways at Indianapolis International Airport is closed. In order to use TEA, the following requirements must be followed:

- a.** The designated arrival runway must be either RY14 or RY32 and the designated departure runway must be either RY23R or RY23L.
- b.** TEA must only be used during the period Tuesday through Friday from 8:00am LCL to 11:00am LCL.
- c.** The TS and CS must coordinate on a recorded line and concur to implement or terminate the use of TEA.
- d.** An entry must be placed on FAA Form 7230-4, Daily Record of Facility Operations indicating that TEA is in use or TEA has been terminated.
- e.** The CS position must not be combined with any other position while TEA is in use.
- f.** LCE and LCW must be combined when TEA is in effect.
- g.** DRE and DRW must be combined to DRE when TEA is in effect.
- h.** DRE has control for climb but are not authorized to turn aircraft departing a non-designated departure runway while they are in Area A.
- i.** The arrival procedure detailed in the Indianapolis Airport Traffic Control Tower/ LIFT Academy Letter of Agreement must not be assigned when TEA is in use.
- j.** Unless an emergency or operational necessity require, arrivals to non-designated arrival RY 5L or RY 5R are not authorized when TEA is in use.

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Section 2. FLIGHT DATA (FD)

3-2-1 DUTIES AND RESPONSIBILITIES.

- a. General Responsibilities.** General responsibilities are outlined in FAAO 7110.65, Tower Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Flight Data	FD	N/A*	005
* FD has a TDW and STARS keyboard that is paired with the LCC/GCC TDW.			

b. Process Weather Information.

1. Automatic Import. IND weather data automatically imports into the IDS and D-ATIS. In the event the automatic weather data import into the IDS fails, indicate the failure with the red "X" feature in the weather area. Manually enter weather data obtained from D-ATIS or weather contractor in the IDS.
2. ASOS. Augment the ASOS via the IDS when tower visibility is received. ASOS password is "██████".
3. PIREPS.
 - (a) Notify CS of any weather changes that impact the requirement to solicit PIREPS.
 - (b) When weather and forecast conditions do not require solicitation of PIREPS, enter "NOT" in the IDS PIREP box. When weather or forecast conditions require solicitation of PIREPS, remove "NOT" from the IDS PIREP box.
 - (c) Disseminate Tower PIREP information via the AIS-R System as directed.

c. ATIS.

1. Prepare and transmit D-ATIS.
 - (a) Include all applicable or required entries (IE, HIWAS statement, "Gate hold procedures are in effect.", "Braking action advisories are in effect.", "Cross runway operations are in effect.", etc.). The ATIS/Advertised approach must be the ILS, unless directed by CS.
 - (b) Advertise "Parallel approaches are in use" when parallel arrival runways are being utilized.
 - (c) Utilize manual ATIS as back-up.
2. Enter ATIS code into the SSA.
3. Enter ATIS code and weather sequence time in IDS.
4. Enter ATIS code into TFDM
5. Verbally notify Tower personnel of new ATIS code.

- d. AIA Count.** Initiate and terminate STARS AIA count. AIA(s) must be counted when the ceiling is at or below 2,100 feet or visibility is less than three (3) miles. **STARS entry: F7,2,C,*,E/I (E for enable, I for inhibit). An “*” will appear in the SSA Airport Information Area.**
- e. IDS.** Update the IDS in the following areas:
1. Designated Runway(s) and Facility Airspace Configuration boxes:
 - (a) Indicate facility airspace configuration in the Facility Airspace Configuration Box.
 - (b) Indicate the Designated Arrival and Departure Runways in the Designated Runway Boxes:
 - (1) IN = Designated Arrival Runway
 - (2) OUT = Designated Departure Runway
 - (3) Non-Designated Runways show as OPEN, CLOSED or UNAVAILABLE.
 - (c) Indicate the ATIS advertised approach(es) in the ATIS Advertised Approaches Boxes.
 - (d) Indicate LC frequencies in use when two LC positions are open (indicate 120.9 for 23L/5R and 127.82 for 23R/5L, unless otherwise directed by CS).
 - (e) LC visual separation indication in the “DESIGNATION” section.
 - (f) Indicate runway closures in the “DESIGNATION” section.
 - (g) Identify when reduced runway separation is not authorized on 23L/5R by denoting “NO RRS” in the “REMARKS” section.
 2. ATIS code and weather sequence time.
 3. Weather sequence and red “X” when automatic import OTS.
 4. DASI OTS and DASI correction factor (if applicable).
 5. PIREPS (Not) Required box.
 6. Tower equipment outages.
 7. Tower surface closures.
 8. All TMU information. Confirm ZID TMU information with ZAU TMU on ZAU TMU airports (IE, ZID TMU ground stop to Midway airport, O’Hare airport, etc. may not apply to IND.).
 9. IND field condition report.
 10. Tower PIREPS.
- f. EFS Posting.**
1. Review EFS for completeness, accuracy, route integrity, LOA compliance and amend as necessary.
 2. Post most current EFS. Ensure EFS containing full route is available for any “FRC” EFS that contains a truncated (./.) route.
 3. Prepare a EFS for all departures. All VFR flights that will receive TRACON radar services must be entered into the NAS.
- g. TMU Releases.** Obtain TMU releases when requested.

- h. Record Delay Information.** Record reportable IND delays on IND Form 6040-31.
- i. TFDM Failure.** In the event TFDM is out of service, prepare paper flight progress strips for all departure aircraft. All VFR flights that will receive TRACON radar services must be entered into the NAS to receive a bar-coded departure FPS
- j. TFDM and EFSTS Failure.** In the event of a TFDM and EFSTS failure, strip request (via FDIO) all IND departure FPS to AD.

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Section 3. CLEARANCE DELIVERY (CD)

3-3-1 DUTIES AND RESPONSIBILITIES.

- a. General Responsibilities.** General responsibilities are outlined in FAAO 7110.65, Tower Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Clearance Delivery	CD	N/A	004

- b. All Clearances.** Issue clearances via RDVS or TDLS equipment. Clearance delivery must review all flight plans for accuracy, LOA compliance, and route integrity prior to verbal/automated clearance dissemination. Do not transmit a flight plan that includes a PDR if the PDR does not connect with the filed route of flight. In the event a revised routing is received after the clearance has been issued, clearance delivery is responsible to insure the revision is issued to the aircraft.

1. **Jets:** Include applicable DP (INDY#, etc.). When no ARTCC LOA DP is applicable, assign jet departures the INDY DP.
2. **Props DP:** Include applicable DP (INDY#, etc.).
3. **Props Non-DP:** Assign departure altitudes for non-DP props in accordance with Appendix E. Include "expect filed altitude" information for non-DP props.

c. Verbal Clearances/PDC

1. CD must review the flight plan for accuracy issue the clearance, mark the EFS and forward it to GC.
2. When a route amendment is required on an issued clearance and the EFS is in CD's EFS Bay:
 - a. CD must update the EFS with the new routing, then ensure block 9D of the EFS is highlighted
 - b. CD must issue the new clearance then place a check mark next to the "FRC" strip marking in Block 9D.
3. When a route amendment is required on an issued clearance and the EFS is in another controllers EFS bay:
 - a. CD must advise the appropriate controller of the amendment.
 - b. The appropriate controller must advise the aircraft to contact CD for the new routing.
 - c. CD must update the EFS with the new routing, then ensure block 9D of the EFS is highlighted.
 - d. CD must issue the new clearance then place a check in Block 9D.

d. CPDLC

1. CD must review the flight plan for accuracy then send the DCL and retain the strip until a “wilco” is received from the pilot.
2. When the “wilco” is received, CD must forward the EFS to GC.
3. If a “wilco” is not received all issues must be resolved at CD as necessary.
4. When a route amendment is required on a CPDLC issued clearance and the EFS is in CD's TFDM bay:
 - a. CD must update the EFS with the new routing.
 - b. CD must send the new clearance via CPDLC or issue the clearance verbally.
 - c. CD must remove the blue dashed border around the new route in Block 9 after the pilot “wilcos” or reads back the updated routing.
 - d. CD must forward the EFS to GC.
5. When a route amendment is required on an issued clearance and the EFS is in another controller's TFDM bay:
 - a. CD must determine the aircraft's position (to insure it is not in a critical phase of flight).
 - b. CD must advise the appropriate controller of the amendment.
 - c. CD must send the new clearance via CPDLC or issue the clearance verbally.
 - d. CD must remove the blue dashed border around the new route in Block 9 after the pilot “wilcos” or reads back the updated routing.
 - e. If a “wilco” is not received by CD, the appropriate controller must have the aircraft contact CD to resolve all issues.

e. Issue Additional Information. When gate hold procedures are in effect, advise aircraft to contact GC for an assigned taxi time.

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Section 4. GROUND CONTROL (GC)

3-4-1 DUTIES AND RESPONSIBILITIES.

a. General Responsibilities. General responsibilities are outlined in FAAO 7110.65, Tower Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Ground Control	GC	N/A	003
Ground Control Center	GCC	N/A	008

NOTE: GCC is a physical location where GC occasionally is worked. It is not a separate Ground Control position.

b. Area of Responsibility. Includes all movement areas, excluding any active runway.

c. ATIS or “Have the Numbers”. Verify aircraft have current ATIS information or pilot states, “have the numbers”, as appropriate, prior to departure.

d. Non-designated Runway Departure.

1. Assign non-designated departure runways in accordance with Appendix A.
2. Obtain approval from LC prior to taxiing an aircraft to non-designated departure runway.
3. Ensure non-designated runway jet departure's departure altitude is assigned in accordance with Appendix E.

e. Intersection Departures. Obtain approval from LC prior to taxiing an aircraft to an intersection for takeoff.

f. Taxi Pattern. The taxi pattern for jets and props will be determined by the CS. GC must taxi accordingly. Taxi patterns are defined as:

1. **Taxi Easy.** Aircraft departure runway may be assigned at the discretion of GC or as otherwise directed by the CS.
2. **Taxi Correct.** Aircraft taxied to the parallel runways must be based on direction of flight.
3. **Taxi Quiet.** Applicable only when Runways 23L/R are in use. Prop aircraft departure runway may be assigned at the discretion of GC or as otherwise directed by the CS. Typically assign North/West bound jet aircraft to runway 23R and East/South bound jet aircraft to runway 23L.

g. Final Approach Obstacle Clearance Surfaces (OCS).

1. Ensure the corresponding OCS (W-Surface) on Taxiway Mike, Runway 14/32 and Taxiway November is clear of prohibited aircraft (as depicted in the IDS) when:

- (a) Runway 23L or runway 23R is being utilized by landing aircraft, and
- (b) the landing aircraft is within 2 miles of the runway threshold.

Phraseology to hold short of runway 23L or runway 23R OCS signage on Taxiway November: "Hold short of runway 23L/23R approach area."

Runway 14/32 and Taxiway Mike do not have OCS signage.

- 2. If it is not possible to clear an OCS prior to an aircraft reaching a point 2 miles from the runway threshold, advise LC to issue go around instructions/traffic information to the landing aircraft and clear the OCS as soon as practical.

Phraseology: "Go around, traffic taxiing on Taxiway Mike/Runway 14/32/Taxiway November."

NOTE: If, in the judgment of the Local Controller, the go around instructions would compromise safety to a greater degree than the overfly situation (IE, conflict with preceding departures(s), etc.), the Local Controller may allow the aircraft to land.

- h. **TMU Initiatives.** Notify FD when an aircraft subject to a TMU initiative begins taxi.
- i. **Flight Progress Strips.** Forward FPS to the appropriate LC position in sequential order, beginning at the bottom.
- j. **Active Runways.** Aircraft and vehicles that travel on an active runway (other than crossing) must be switched to the appropriate LC frequency. This requirement exists even when LC and GC are combined.
- k. **Gate Hold Procedures.** Gate hold procedures are initiated by the CS. Once implemented, assign taxi times. Assigned taxi time intervals are determined by the CS. The pilot is expected to have completed de-icing, engine start and pushback and be prepared to taxi at the assigned taxi time.
- l. **SMGCS.** When RVR is below 1200 and directed by CS, GC must utilize SMGCS taxi routes. Detailed information is contained in the IND Airport SMGCS Plan located in the IND Facility Equipment/SOP Supplement Binder.

3-4-2 SPECIAL EVENT GROUND CONTROL POSITIONS.

a. General. Ground Metering (GA2) and Ground Control Coordinator (GA) positions are designated as a Special Event Positions. They will only be used during special events as determined in advance by the Air Traffic Manager or their designee. GA2 and GA assume specific duties normally assigned to the Ground Control (GC) Position. Certification on the GC Position qualifies the specialist to work both the GA2 and GA positions.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Ground Metering	GA2	N/A	Any Available
Ground Control Coordinator	GA	N/A	Any Available

b. Ground Metering – GM. Ground Metering is responsible for monitoring aircraft parking areas and determining the sequence for aircraft at each ramp exit point and/or de-icing area. The frequency for use by Ground Metering will be determined prior to the special event. This position will not issue control instructions to aircraft on the ramp or non-movement areas.

1. Locate the Electronic Flight Strips (EFS) and record the ramp exit location or de-icing area in Block 19 of the EFS for each aircraft that advises they are ready to taxi or move to a de-icing area.
2. Advise aircraft as to what runway to expect for departure based on the current taxi pattern in use and/or direction of flight.
3. Obtain a flow control release (if necessary) from FD prior to an aircraft leaving a ramp exit point or de-icing area.
4. Ensure aircraft have the current ATIS code just prior to advising them to contact ground control for taxi to the runway for departure. Record the current ATIS code in Block 10 of the EFS.
5. Instruct the aircraft to advise when they are number one and ready and holding short of the ramp exit point or in the de-icing area. Advise the pilot to contact GC on the GC frequency in use.

c. Ground Control Coordinator – GA. GA will monitor the GC frequency(ies) and provide assistance to the ground controller to help them maintain overall situational awareness of the position and enhance the efficiency of the operation. This position will not normally issue control instructions to aircraft.

1. Advise the Ground Controller of any observed or anticipated unsafe operations.
2. Maintain awareness of tower cab activities.
3. Monitor inbound and outbound traffic flows to ensure the correct sequence of aircraft to and from the ramp is maintained.
4. Assist Ground Control by accepting/ initiating coordination for the continued smooth operation of the position and ensure that the Ground Controller is made immediately aware of any actions taken.
5. Work with FD and CD to ensure accurate flight plan information and flow control release times.
6. Ensure strip marking is complete and accurate.

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(PAGES 123 - 132)**

Section 5. LOCAL CONTROL (LC)

3-5-1 DUTIES AND RESPONSIBILITIES.

- a. General Responsibilities.** General responsibilities are outlined in FAAO 7110.65, Tower Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Local Control West	LCW	X	002
Local Control East	LCE	Y	006
Local Control Center	LCC	T	008

NOTE: LCC is a physical location where LCE/LCW are typically worked combined. It is not a separate Local Control position.

- b. Area of Responsibility.** Area of responsibility includes active runway(s) and the Tower surface area of responsibility (SAR). The SAR is affected by the approval of a non-designated runway arrival.

1. Configuration.

CONFIGURATION	LC	RY	AREA A SAR	AREA B SAR
Runway 5	LCE	5R	A-LCE	B-LCE
	LCW	5L	A-LCW	B-LCW
Runway 23	LCE	23L	A-LCE	B-LCE
	LCW	23R	A-LCW	B-LCW
Runway 14	LC	14	A	B
Runway 32	LC	32	A	B
TEA - Runway 14	LC	14	A	B
TEA - Runway 32	LC	32	A	B

2. Non-designated runway arrival.

(a) Upon approval of a non-designated runway arrival, the Area B extension associated with a non-designated arrival runway becomes active and extends toward the extended centerline of the designated arrival runway as depicted.

(b) The Area B extension associated with the non-designated arrival runway remains active until the non-designated runway arrival lands.

(c) The radar controller will initiate a datablock transfer to LC on all non-designated runway arrivals. LC must accept the datablock transfer no later than the mandated transfer of communications point.

(d) Two LC positions operational:

- (1) Non-designated runway arrivals are authorized for emergency, lifeguard and aircraft operational necessity only.
- (2) The LC associated with the Area B of the non-designated runway arrival is responsible for the non-designated arrival runway.

c. Non-designated Runway Departures.

1. LC shall notify GC of an imminent departure off a non-designated departure runway prior to issuing takeoff clearance.

2. Two LC positions operational:

(a) Non-designated runway departures are only authorized in VFR conditions between sunrise and sunset. Exception: Non-designated runway departures are authorized for lifeguard and aircraft operational necessity at any time.

(b) The LC associated with the Area A that the non-designated runway departure will initially enter is responsible for the non-designated departure runway.

(c) The controlling LC shall notify GC, the other LC and CS of an imminent departure off of a non-designated departure runway prior to issuing takeoff clearance.

d. Operation Completed. LC shall notify GC when a coordinated operation involving a non-designated runway is complete or a runway is no longer active.
Phraseology: "Runway ##, your control."

e. Departure Headings.

1. Departure headings:

(a) are authorized and shall be assigned in accordance with Appendix F.

(b) shall immediately enter Area A.

(c) shall provide radar separation from the lateral confines of Area B.

(d) shall transition departures directly into the proper DR airspace on the most advantageous heading authorized by Appendix F. This requirement is not affected by combining the respective DR with any position, including the other DR.

(e) runway heading off of a designated departure runway is assumed to transition directly into both DR's airspace.

(f) LC shall adjust the specified authorized headings for:

- (1) hazardous weather avoidance, when necessary, or

(2) appreciable wind that alters an aircraft's intend track over the surface of the earth. These heading adjustments are intended to maintain the integrity of the noise abatement program while ensuring aircraft courses diverge immediately after takeoff.

Example: A 240° heading (or other necessary heading) is permitted off of RY 23R to compensate for a northwest crosswind wind so as to maintain a RH track over the surface of the earth and ensure immediate course divergence with an aircraft off of RY 23L on a 210° heading.

Prior to issuance, LC shall coordinate the specified authorized heading adjustments with DR and the other LC, if applicable. IE, "Departure headings will be adjusted for crosswind until further advised."

2. When two LC are operational and both parallel runways are designated departure runways in a runway 5 or runway 23 configuration:

- (a) peak traffic conditions exist.
- (b) departure headings shall be assigned in accordance with the following table:

LC	DEPARTURE RUNWAY	AIRCRAFT TYPE	DEPARTURE HEADING	
			"Area A" requires a departure heading that will enter Area A.	
LCE	5R	Props	Area A ^{-LCE} via 070° or a heading further right than 070°.	
		Jets	Area A ^{-LCE} via 070°.	
	23L	Props	Area A ^{-LCE} via 210° or a heading further left than 210°.	
		Jets	Area A ^{-LCE} via 210°.	
	14	Props	Runway 5 configuration	Area A ^{-LCE} via a heading as far left as 070°.
			Runway 23 configuration	Area A ^{-LCE} via a heading as far right as 210°.
		Jets	Runway 5 configuration	RH until 2,500 MSL then Area A ^{-LCE} via a heading as far left as 070°.
			Runway 23 configuration	RH until 2,500 MSL then Area A ^{-LCE} via a heading as far right as 210°.
LCW	5L	Props	Area A ^{-LCW} via RH or a heading further left than RH.	
		Jets	Area A ^{-LCW} via RH.	
	23R	Props	Area A ^{-LCW} via RH or a heading further right than RH.	
		Jets	Area A ^{-LCW} via RH.	
	32	Props	Runway 5 configuration	Area A ^{-LCW} via a heading as far right as 050°.
			Runway 23 configuration	Area A ^{-LCW} via a heading as far left as 230°.
		Jets	Runway 5 configuration	RH until 2,500 MSL then Area A ^{-LCW} via a heading as far right as 050°.
			Runway 23 configuration	RH until 2,500 MSL then Area A ^{-LCW} via a heading as far left to 230°.

- f. **Departure Altitudes.** Departure altitudes are depicted in Appendix E.
- g. **DR Restrictions.** LC must verbally restrict DR to ensure separation with an untagged or subsequent/successive IND departure.
- h. **Tagged Aircraft.** LC must notify the appropriate DR if an IND departure is not tagged within five (5) NM.
- i. **Control Instructions.** LC assumes responsibility for separation of aircraft with any instruction other than a landing clearance
- j. **Go-Arounds and Unplanned Missed Approaches.** Go-arounds and unplanned missed approaches are dynamic situations and may not fit into a prescribed plan of action. Specialists should apply the following procedures but are expected to use good judgment in all circumstances and not create situations where recovery is not possible:
 - 1. Give first priority to separating aircraft and issuing safety alerts, taking into account airspace configuration, weather, blocks and point outs.
 - 2. Issue appropriate control instructions to establish separation.
 - 3. Once separation has been established, coordinate with all affected control positions (e.g. Departure and Final control positions) regarding altitude, heading etc.
 - 4. If the unplanned go-around or missed approach was initiated within ½ NM of the runway threshold, inform the CIC of the reason for the go-around or missed approach.
- k. **Single Person Midnight Operations.** When single person midnight operations are being conducted in the TRACON, LC must request release for IND departures occurring more than then (10) minutes after a preceding IND departure.
- l. **Lighting.** As necessary, adjust/set:
 - 1. the rotating beacon.
 - 2. approach lighting.lighting. Note: Runway 5/23 RGL(s) operate in conjunction with runway edge lights.
 - 4. taxiway lighting.
 - 5. runway 14/32 RGL(s) are on a separate circuit and are to remain on unless the runway is closed.
- m. **ILS.** As necessary, adjust/set ILS for the designated arrival runway and for any approved non-designated runway arrivals (ILS approaches).
- n. **TFDM.**
 - 1. Ensure the aircraft departure runway, departure heading (if other than runway heading), departure altitude (if other than 50) and "V" (when the aircraft is maintaining visual separation with the nearest preceding departure) are depicted via TFDM. Any other application of an aircraft maintaining visual separation must be specifically coordinated with DR prior to transfer of communication of the aircraft maintaining the visual separation.

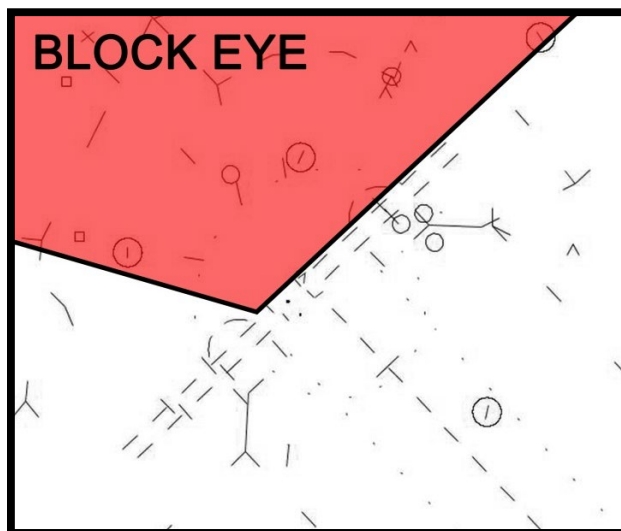
2. Push the "PRINT" NLA button on the TFDM display between the time the aircraft begins take-off roll and the time the aircraft is instructed to contact departure (normally within ½ mile beyond the runway end). This action fulfills the non-verbal rolling/boundary notification used for primary radar identification.
3. In the event TFDM is out of service, utilize the EFSTS system and scan the FPS between the time the aircraft begins take-off roll and the time the aircraft is instructed to contact departure (normally within ½ mile beyond the runway end). This action fulfills the non-verbal rolling/boundary notification used for primary radar identification.
4. Notify DR, FD and CS of an EFSTS failure.
5. In the event of an EFSTS failure, provide DR with a verbal rolling/boundary notification for each departure.

o. LUAW.

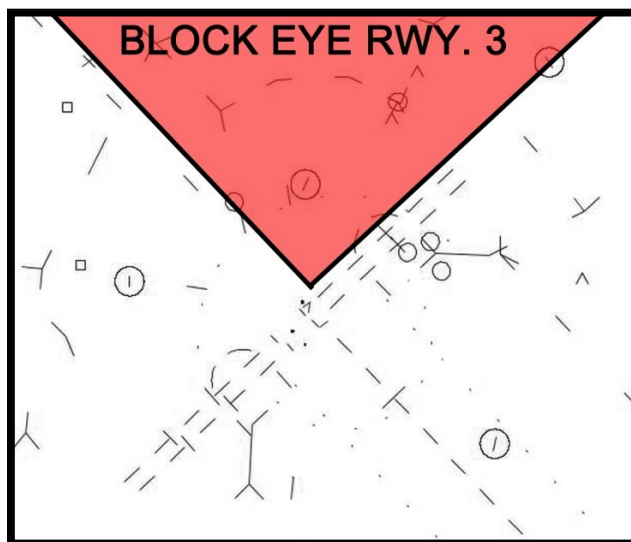
1. EFS must be left in the LUAW state for an aircraft that is instructed to LUAW.
2. LUAW is authorized between sunset and sunrise at intersections provided:
 - (a) LUAW is conducted only at runway 23L at taxiway C-2 or taxiway D-2.
 - (b) LUAW is conducted only at runway 23R at taxiway A-2 or taxiway B-2.
 - (c) the intersection is visible from the tower.
 - (d) the runway is used for departures-only.
 - (e) only one aircraft at a time is permitted to LUAW on the same runway
 - (f) the TS is notified when LUAW is being conducted and upon termination.

p. Special Satellite Airport Operations.

1. Eagle Creek airport (EYE) operations.
 - (a) Retain all VFR departures to EYE.
 - (b) When "Block Eagle Creek" is coordinated, assign departure headings which will not penetrate the protected area in the following depiction. Runway heading off of runway 5L and approaches to runway 23R are authorized.



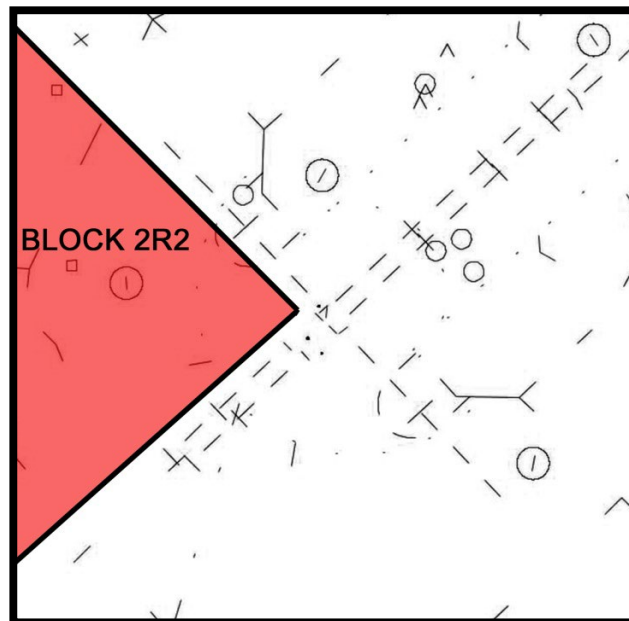
(c) When "Block Eagle Creek runway 3 is coordinated, assign departure headings which will not penetrate the protected area in the following depiction. Runway heading off of runway 5L and runway 32 are authorized. Approaches to runway 14 and runway 23R are authorized.



2. Hendricks County-Gordon Graham Field (2R2) operations.

(a) Retain all VFR departures to 2R2.

(b) When "Block 2R2" is coordinated, assign departure headings which will not penetrate the protected area in the following depiction. Runway heading off of runway 23R and runway 32 are authorized. Approaches to runway 5L and runway 14 are authorized.



3. Greenwood airport (HFY) operations. Retain all VFR departures to HFY.

q. Functional Use of Certified Tower Radar Display (CTRD). The Tower Display Workstation (TDW) may be used for any terminal radar function in which the specialist is qualified while performing the duties associated with Local Control. These radar functions for arrival, departure and en-route IFR/VFR aircraft include:

1. Radar Vectors
2. Radar Separation
3. Radar Traffic Advisories
4. Radar Handoff / Point Out.

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CHAPTER 4. TRACON

Section 1. TRACON GENERAL

4-1-1 INTER-FACILITY HAND-OFF AND POINT-OUT PROCEDURES.

a. Inter-facility Hand-offs.

1. Automated Hand-offs. IND departures, IND satellite airport departures and enroute aircraft will normally generate automatic hand-offs to ZID or ZAU. Tower enroute aircraft will normally generate automatic hand-offs to adjacent approach control facilities.
2. Directed Hand-offs. Specialist may direct inter-facility hand-offs.

TO		STARS KEYBOARD ENTRY	
ZID or ZAU		"C", slew, enter	
Specific ZID Sector		"C##" (sector number), slew, enter	
Specific ZAU Sector		"Z##" (sector number), slew, enter	
Specific Approach Control		"Δ#" (approach control number), slew, enter	

ARTCC SECTOR	SECTOR NUMBER	APPROACH CONTROL NAME	APPROACH CONTROL NUMBER
ZID-MIE	33	CMH	1
ZID-SHB	34	CVG	2
ZID-HUF	35	HUF	3
ZID-ABB	18	GUS	4
ZAU-IKK	53	FWA	5
ZAU-DNV	57		
ZAU-OKK	32		

b. **Redirect Hand-offs.** Specialists shall redirect incorrect inter-facility hand-offs to the appropriate position.

c. **Inter-facility PO Procedure.** When accepting a PO from an adjacent ARTCC or ATCT, initiate a STARS track.

TRACK TYPE	STARS KEYBOARD ENTRY	DISPLAY
Beacon	"*, ####" (beacon code), enter	OV1234
Non-Beacon	"OV, ####", slew, enter	OV9999
Non-Mode C- Enter assigned altitude.	"####" (altitude), slew, enter	"####" in scratchpad.
Climbing/Descending- Enter the authorized climbing/descending altitude. The data shall be removed when the aircraft completes the climb/descent.	"+, ###" (authorized climbing or descending altitude), slew, enter	"A####" below FDB.
	"+, 000" (removes authorized climbing or descending altitude), slew, enter	Removes "A####" below FDB.

4-1-2 PRE-ARRANGED Coordination Procedure (P-ACP). P-ACP allows authorized users to enter from externally (above or below) and transition through FR and/or FN airspace. P-ACP allows authorized users to exit from within and transition out of FR and/or FN airspace.

- a. **Authorized Users.** DRE and DRW are authorized to use P-ACP subject to the use restrictions.
- b. **Authorized Use.** The authorized use of P-ACP by DR is voluntary.
 - 1. DRE may climb or descend, but not level, tagged aircraft without coordination through/within FRD and FNF airspace.
 - 2. DRW may climb or descend, but not level, tagged aircraft without coordination through/within FRB and FNI airspace.
- c. **Use Restrictions.** DR shall:
 - 1. quicklook all FR positions when P-ACP is being utilized in any FR airspace.
 - 2. quicklook all FN positions where P-ACP is being utilized in any FN airspace.
 - 3. display a FDB to the FR and/or FN position prior to utilizing P-ACP. **STARS entry example: “**, B, slew, enter” (displays FDB at FRB).**
 - 4. provide lateral or vertical separation, including wake turbulence separation, with all STARS tagged or coordinated aircraft. Exception: DR is not required to provide separation from and may be in level flight under aircraft with “CVG” in the FDB that are at 14,000 or above.
- d. **Other Restrictions.**
 - 1. FR and/or FN shall verbally inform the appropriate DR of all untagged targets, point out aircraft not on their position symbol or invalid Mode C readouts within their respective airspace that may affect P-ACP.
 - 2. Prior to accepting a hand-off, DR or ST shall display the FDB to any DR that may utilize P-ACP with respect to the aircraft.
 - 3. P-ACP shall not be used when the STARS is in DSA mode.
- e. **Suspension of P-ACP.** P-ACP may be suspended by the FR and/or FN controller in unusual situations.

4-1-3 CONTROL FOR TURNS AND SPEED ADJUSTMENTS WITH IND ARRIVALS.

FN shall have control for +/- 20° turns and +/- 20 knots of speed adjustment on contact with all IND arrivals.

4-1-4 SATELLITE AIRPORT DEPARTURE PROCEDURES.

- a. **Clearance Void and “Advise Intentions” Times.** Assign a clearance void time and an “advise intentions” time to all IFR aircraft departing an uncontrolled airport. Unless specified otherwise, the “advise intentions” time shall be ten (10) minutes after the clearance void time.

b. Memory Aid Tracks.

1. Upon issuing a release for an aircraft departing an uncontrolled airport, the radar controller shall initiate a memory aid track over the departure airport utilizing the airport identifier in the track. The track must begin with an alpha character. I.E. EYE, TYQ or KGPC
2. After the aircraft departs, remove the memory aid track.

c. Obstacle Departure Procedures/Instrument Departure Procedures.

Assign IFR departing aircraft Obstacle Departure Procedures/ Instrument Departure Procedures for the following airports/runways:

1. Indianapolis Regional runway 25.
2. Eagle Creek runway 3.
3. Eagle Creek runway 21.

d. Specific Initial Heading. As necessary, assign IFR departing aircraft a specific initial heading to be flown after takeoff so as to only apply within controlled airspace.

e. Columbus Departures. Assign aircraft departing Columbus the following departure procedures when R3401 is active:

1. Runway 23: A heading that will track 180° inclusive counterclockwise to 360° inclusive.
2. Runway 32: A heading that will track 360° inclusive clockwise to 180° inclusive.

4-1-5 SPECIAL SATELLITE AIRPORT PROCEDURES.

a. Eagle Creek Operations. Coordinate with affected controllers and coordinate with LC as necessary. Utilize the following phraseology:

1. Arrivals: "Block Eagle Creek."
2. Departures:
 - (a) Runway 3: "Block Eagle Creek runway 3."
 - (b) Runway 21: "Block Eagle Creek."
3. Cancel a block when it is no longer required: "Cancel Eagle Creek block."

b. Hendricks County-Gordon Graham Field (2R2) Operations. Coordinate with affected controllers and coordinate with LC as necessary. Utilize the following phraseology:

1. Arrivals: "Block 2R2."
2. Departures: "Block 2R2."
3. Cancel a block when it is no longer required: "Cancel 2R2 block."

c. **Indianapolis Regional Airport (MQJ) Operations.** When Indianapolis International Airport is on a Runway 23 configuration, perform the following actions for IFR aircraft departing Runway 25 at MQJ:

1. Prior to issuing a departure release, the radar controller responsible for issuing the release, must initiate a Memory Aid Track over MQJ.
2. The data block associated with the Memory Aid Track must then be pointed out to the FNF controller using the STARS Intrafacility Pointout function. (F, *, Slew ENTER)
3. When the FNF controller accepts the pointout, the FNF controller must block their airspace within an eight (8) nautical mile radius of MQJ at or below 3,000 feet MSL.
4. Once the FNF controller accepts the pointout, the aircraft may be released off of MQJ.
5. When the airspace block is no longer needed, the radar controller responsible for issuing the release, must terminate the Memory Aid Track over MQJ.
6. When the FNF controller observes that the Memory Aid Track is terminated, they may cancel the airspace block.

4-1-6 IND LIFEGUARD ARRIVALS. Notify FN (unless FPS are being utilized) and the Tower of any IND lifeguard arrival that does not reflect lifeguard status in the ACID (IE, air carrier flights with lifeguard designation in remarks of FP only).

4-1-7 ACTIVE SPECIAL USE AIRSPACE (SUA) DISPLAY AND PROCEDURES.

a. **Display.**

1. Boundaries. Display active SUA boundaries via STARS mapping.
2. Altitudes. Display active SUA altitudes via STARS mapping and/or STARS text (back-up). **STARS entry: F12,G,###, slew, enter.**

b. **Procedures.** Victor 53 (V53) is not procedurally separated from R3401-B. When R3401-B is active, do not permit aircraft to navigate via V53 adjacent to R3401-B at a conflicting altitude. Provide radar separation from R3401-B.

4-1-8 STARS TERMINATE CONTROL RESTRICTIONS. Specialists shall not terminate control (IE, "track drop") other controllers' FDB(s).

4-1-9 NON-DESIGNATED RUNWAY ARRIVAL DATABLOCK TRANSFER. The radar controller responsible for a non-designated runway arrival must initiate a STARS datablock transfer to LC when the arrival is between 10NM to 15NM from the airport. If LC has not completed the datablock transfer by the mandated transfer of communications point, the radar controller must verbally coordinate a handoff or a go around procedure for the non-designated runway arrival.

4-1-10 INDIANAPOLIS INTERNATIONAL AIRPORT ARRIVALS FLIGHT

PROGRESS STRIP USAGE. The IND Air Traffic Manager has waived the requirement to use flight progress strips for Indianapolis International Airport arrival aircraft at facility radar positions.

a. Datablocks. Specialist working Indianapolis International Airport arrival aircraft must ensure the datablock for the arrival aircraft is kept up-to-date at all times.

b. Transition to Non-Radar. In the event there is a need to transition to a non-radar environment, information in the datablock can initially be used to transition to non-radar and implement contingency procedures.

c. Radar Sites. If only one radar site is available for use, specialists must use flight progress strips for Indianapolis International Airport arrival aircraft until at least one other radar site becomes available for use.

d. Unused Flight Progress Strips and Notepads. Unused flight progress strips and blank notepads will be provided for controller use.

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Section 2. ARRIVAL DATA (AD)

4-2-1 DUTIES AND RESPONSIBILITIES.

a. General Responsibilities. General responsibilities are outlined in FAAO 7110.65, Terminal Radar Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Arrival Data	AD	N/A	020

b. FPS Posting and Collection.

1. Post FPS in the strip bay adjacent to the control position in time sequence beginning at the bottom. Ensure FPS containing full route is available for any "FRC" FPS that contains a truncated (./.) route.
2. Place any Indianapolis International Airport arrival flight progress strip(s) in the collection bin adjacent to the radar position working Indianapolis International Airport arrivals.
3. Collect FPS hourly, on the hour. Label FPS "bundles" with the time (UTC) and date. At the end of the day (0000L), all hourly bundles are to be collected, affixed together, and placed in the appropriate file.

c. IDS. Update the IDS in the following areas:

1. SUA information.
2. Non-standard frequencies and operations.
3. IND approach outages.
4. Towered satellite airports active runways.
5. Satellite tower weather sequence when automated weather data system (AWOS, ASOS, etc.) and/or ATIS are unavailable.
6. Satellite tower ATIS code, where applicable.
7. Satellite airport NOTAMS. Update airport NOTAM status on airport page. Update runway closures on airport page in the runway status box using "P" for a pending closure and "X" for actual runway closure.
8. VOR outages.
9. TRACON PIREPS.

d. ATIS notification. Upon notification, verbally notify TRACON personnel of any new ATIS codes.

e. Process Weather Information. Disseminate TRACON PIREP information via the AIS-R System as directed.

f. Satellite ATCT(s). Pass proposed FP information to satellite control towers during their respective hours of operation via RDVS.

g. Uncontrolled Airport Clearances and Releases. Obtain uncontrolled airport departure clearances and releases from the appropriate radar controller.

1. Unless otherwise specified by the radar controller:
 - (a) issue a departure altitude of 3,000 MSL.
 - (b) issue a departure frequency appropriate for the airspace encompassing the satellite airport at 3,000 MSL.
 - (c) issue "HFR" pending subsequent coordination with the radar controller.
 - (d) determine the intended departure runway.
2. Once the aircraft is ready for departure, coordinate with the radar controller and issue:
 - (a) any departure procedures or instructions assigned by the radar controller utilizing the following phraseology
 - (1) MQJ runway 25 DP: "Depart via the Indianapolis Regional runway 25 departure procedure, when able fly heading ###°".
 - (2) EYE runway 3 DP: "Depart via the Eagle Creek runway 3 departure procedure, when able fly heading ###°".
 - (3) EYE runway 21 DP: "Climb heading 270° to 1600 then turn right heading ###°".
 - (4) Specified initial heading to be flown after takeoff so as to apply only within controlled airspace: "When entering controlled airspace, fly heading ###°".
 - (b) release, clearance void and "advise intentions" times assigned by the radar controller.

h. Special Use Airspace Notification. Notify Columbus tower when R3401 becomes active or inactive.

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(PAGES 168 - 178)**

Section 3. DEPARTURE RADAR (DR)

4-3-1 DUTIES AND RESPONSIBILITIES.

a. General Responsibilities. General responsibilities are outlined in FAAO 7110.65, Terminal Radar Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Departure Radar West	DRW	W	012
Departure Radar East	DRE	E	013

b. Automatic Releases. Except when single person midnight operations are being conducted in the TRACON, DR approves automatic release of IND departures. DR approves release of IND departures via authorized departure headings in Appendix F and authorized departure altitudes in Appendix E.

c. Auto-acquisition. DR shall determine if a departure auto-acquires. If a departure does not auto-acquire, take appropriate action (IE, temporary tag until FP corrected, HOST DM, manual inter-facility HO, etc.).

d. MODE-C Validation. DR shall immediately inform the appropriate LC if an IND departure's MODE-C readout is invalid.

e. Climb Instructions. DR shall not issue an IND IFR departure a climb at "pilot's discretion" while operating below 4,000 MSL or an IND VFR departure a climb at "pilot's discretion" while operating below 3,500 MSL.

f. Control for Turns. DR shall have control for turns with IND departures within Area A provided:

1. the turn does not conflict with a verbal restriction from LC.
2. separation is ensured with the respective DR previously departed, tagged traffic.
3. separation is ensured with a subsequent runway heading departure(s) off of the same departure runway.
4. the turn is away from the extended centerline of the designated departure runway and transitions directly into the respective DR airspace. This requirement is not affected by combining the respective DR with any position, including the other DR.
5. the turn is in compliance with the following noise abatement restrictions:

AIRCRAFT TYPE	TIME (LCL)	DEPARTURE RUNWAY	RESTRICTION
PROPS	Any	All	None.
JETS	0700-1900	All	2,500' MSL prior to turn.
		23L	Remain RH, 210° or 245° heading until 5.5 DME.
	1900-0700	23R	Remain RH or 215° heading until 6.5 DME.
		All others	2,500' MSL prior to turn.

g. TFDM/EFSTS.

- 1.** Notify LC of non-receipt of departure strip.
- 2.** Notify LC, AD and TS of a TFDM or EFSTS failure.

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(PAGES 181 - 191)**

Section 4. SATELLITE RADAR (ST)**4-4-1 DUTIES AND RESPONSIBILITIES.**

- a. General Responsibilities.** General responsibilities are outlined in FAAO 7110.65, Terminal Radar Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Satellite Radar North	STN	N	019
Satellite Radar South	STS	S	018

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(PAGES 193-203)**

Section 5. FEEDER RADAR (FR)**4-5-1 DUTIES AND RESPONSIBILITIES.**

- a. General Responsibilities.** General responsibilities are outlined in FAAO 7110.65, Terminal Radar Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Feeder Radar West	FRB	B	014
Feeder Radar East	FRD	D	015

**See Notice
IND N 7110.083**

- b. CVG Arrivals.** Ensure CVG TRACON terminal area arrivals at 14,000 or above have "CVG" in the FDB. FR shall not descend said CVG TRACON terminal area arrivals until within the lateral confines of Area X.

- c. Altimeter Updates.** Update the STARS SSA altimeter setting.

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(PAGES 205 - 215)**

Section 6. FINAL RADAR (FN)

4-6-1 DUTIES AND RESPONSIBILITIES.

- a. **General Responsibilities.** General responsibilities are outlined in FAAO 7110.65, Terminal Radar Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Final Radar West	FNI	I	010
Final Radar East	FNF	F	011

- b. **IND Arrival Noise Abatement.** Between 2200 – 0600 LCL, jet aircraft landing runway 5L shall intercept the final approach course at or outside of **STDUM** and jet aircraft landing runway 5R shall intercept the final approach course at or outside **BGTEN**.

- c. **Flight Paths.**

1. Turns to final. When vectoring multiple aircraft to join the final approach course of the same or parallel runway(s) (IE, opposing base legs, base leg in front of conflicting straight-in, etc.), vertical separation must be maintained until another form of separation is established and will be maintained (IE, lateral separation, visual separation by the pilot(s), visual separation by LC, etc.).

2. Visual approaches. When conducting visual approaches to parallel runways, controllers are responsible for positioning aircraft so that the pilot has the opportunity to successfully execute a visual approach without overshooting the final approach course. Aircraft geographical position, performance, speed and the number of degrees of the turn to the final approach course are factors to be considered by the controller before clearing an aircraft for a visual approach to a parallel runway.

- d. **Sequencing Authority.** FNI has sequencing authority.

- e. **Separation.**

1. Ensure separation of IND arrivals until LC will provide visual separation or is otherwise responsible for separation (IE, control instruction other than landing clearance).

2. Any application of an aircraft maintaining visual separation not specifically described by arrival FDB scratchpad data shall be specifically coordinated with LC prior to transfer of communication of the aircraft maintaining the visual separation.

f. Single Person Midnight Operations. When single person midnight operations are being conducted in the Tower, FN shall initiate an automated HO with LC on all IND arrivals unless the subsequent IND arrival is within ten (ten) miles of IND when the preceding IND arrival lands. If LC has not accepted the HO prior to the transfer of communications and control point, FN will cancel the IND arrival's approach clearance and initiate re-sequencing vectors. FN shall initiate action to determine the status of LC.

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Section 7. RADAR COORDINATOR (RC)**4-7-1 DUTIES AND RESPONSIBILITIES.**

a. General Responsibilities. General responsibilities are outlined in FAAO 7110.65, Terminal Radar Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
Radar Coordinator	RC	N/A	N/A

b. Additional Responsibilities. The RC shall:

1. assist the position(s) assigned by the TS.
2. perform inter-facility/sector/position coordination of traffic actions.
3. advise the radar positions of facility/sector actions required to accomplish overall objectives.
4. perform any of the functions of the radar team which will assist in meeting situation objectives.

c. Separation Responsibility. When the RC is staffed, the RC assumes responsibility for managing traffic flow and the radar position retains responsibility for aircraft separation.

d. Combining the Position. When the RC position is combined, RC duties are combined with the TS.

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CHAPTER 5. WATCH SUPERVISION

Section 1. OS/CIC – GENERAL

5-1-1 DUTIES AND RESPONSIBILITIES.

a. Specific Duties and Responsibilities. Watch supervision requires maintaining situational awareness (defined below) of traffic activity and operational conditions in order to provide timely assistance to specialists and ensure that available resources are deployed for optimal efficiency. Watch supervision requires completion of the following tasks:

1. Provide guidance and goals for the shift.
2. Monitoring/managing traffic volume/flow.
3. Position assignments. Assign operational positions to maximize accomplishment of overall objectives. This includes assigning RC to assist a specific position(s), assigning specific specialists to specific positions, etc.
4. Position relief.
5. Training assignments.
6. Process leave requests based on written Directives.
7. Configuring/monitoring/reporting equipment status.
8. Data collection and reporting.
9. Monitoring presidential aircraft and reporting security requirements.
10. Situational awareness is defined as a continuous extraction of environmental information, integration of this information with previous knowledge to form a coherent mental picture, and the use of that picture in directing further perception and anticipating future events. Simply put, situational awareness means knowing what is going on around you.
11. Management of the operational environment with a goal toward eliminating distractions.

b. Single Person Midnight Operations. Advise counterpart watch supervisor (CS advise TS; or, TS advise CS) when single person midnight operations are being conducted in their operational area. Upon notification, the CS/TS shall advise all personnel in their operational area of single person midnight operations in the other operational area.

c. Combined Positions. Advise counterpart watch supervision (CS advise TS; or, TS advise CS) when LC or DR is decombined. Upon notification, the CS/TS shall advise all personnel in their operational area of the decombined positions.

d. Designated Runway Change. The designated arrival and designated departure runway(s) remain in effect until the last arrival to the designated arrival runway lands and the last departure off of the designated departure runway tags. Coordination between the CS and the TS regarding a change in designated arrival or designated departure runway(s) shall:

1. Be accomplished by utilizing the runway change checklist in Appendix B.

2. be on a recorded line.
3. identify the last arrival to the previous designated arrival runway.
4. identify the first arrival to the new designated arrival runway.
5. identify the last departure off of the previous designated departure runway.

e. Equipment Checks. Conduct equipment checks utilizing the equipment checklist contained in Appendix B. The CS shall notify TS when Tower equipment checks are completed. The TS shall enter "WCLC" in the Facility Log 7230-4 when all watch checklists have been completed.

f. IND TMU Initiatives. Any coordination with ARTCC TMU/ARTCC Sectors/adjacent approach controls regarding any IND TMU initiative (ground stop, MIT restrictions, airborne holding, etc.) shall be on a recorded line.

g. Environmental Control Adjustments. Only watch supervision is authorized to adjust the TRACON lighting and temperature control settings in the TRACON or Tower. TRACON lighting adjustments should be made only on rare occasions since adjustments adversely affect specialists' STARS display settings.

h. General Notice (GENOT) Handling. AIS-R, or equivalent Service B message provider via NADIN/NMR, must be checked daily for new GENOTs. Upon receipt of the GENOT the ATM or designee (TCID Support) will review the GENOT to determine if it is applicable to their facility. The Indianapolis District (TCID) has assumed all responsibilities for the processing, dissemination, and briefing of GENOTs. TCID will post all GENOTs in TEAM for briefing purposes. The IND ATCT Air Traffic Manager will be included in the TEAM assignment.

i. Overtime. Overtime expenditures must be authorized by a management official.

j. TSA Requests. In the event TSA requests IND provide special handling to an aircraft:

1. TSA authority to request that FAA delay an aircraft from departing, direct an aircraft that is taxiing to return to the gate, or direct that a departed aircraft return and land, is delegated only to TSA senior management officials, such as TSA Federal Security Director (FSD) or Assistant Federal Security Director (AFSD).
2. Obtain the reason for the request.
3. Obtain a pass-code for authentication of the request.
4. Notify the ATM and/or the DEN.
5. Contact the TSA Duty Manager for additional information.

k. Elimination of Distractions in the Workplace.

1. The Operational Area is defined as:
 - (a) TRACON (excluding the coffee and sign-in rooms)
 - (b) TOWER CAB

2. The following activities or tasks will not be conducted in the operational area:
 - (a) No cell phone use or use of electronic devices.
 - (b) Computer use while on an operational position including AD/FD/CD/TS and CS (except for performing work pertinent to operation at times when safety is not compromised).
 - (c) Personal Internet usage, such as checking personal e-mail, etc.
 - (d) Personal phone calls.
3. Additional activities or tasks that could be a distraction and may need to be moved or deferred:
 - (a) Additional people in the operational area (ex: tours, employees loitering in operational area not assigned a position)
 - (b) Training discussions before or after working position.
 - (c) Scheduling or leave selection, except for acting on leave requests by OS/CIC.
4. Areas where the tasks listed in k. 2. and k. 3. may be performed:
 - (a) Employee break rooms
 - (b) Conference rooms
 - (c) Debriefing rooms
 - (d) CBI rooms

I. Navigational Aid (NAVAID) Monitoring and Malfunctions.

1. NAVAID Monitoring.

(a) Indianapolis Air Traffic Personnel are responsible for monitoring the status of the ILS and associated DME (as applicable) systems for each runway at Indianapolis International Airport unless Technical Operations personnel assume those responsibilities.

(b) At the beginning of each shift, follow the facility Equipment Checklist in Appendix B and check the ICMS and ILS DME monitor panels for normal operation. Record the system status on the 7230-4 Facility Log. A log entry of "WCLC" indicates that the systems have been check and they are operating normally.

NOTE– When Technical Operations personnel silence the monitoring system of any NAVAID, they will assume responsibility for the monitoring function.

2. NAVAID Malfunctions. If a pilot reports a malfunction with an Indianapolis International Airport ILS or DME system or an alarm signal indicates a system component malfunction, follow the established procedures in FAA JO 7110.65 and FAA JO 7210.3 to process the malfunction.

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Section 2. OS/CIC – Tower (CS)

5-2-1 DUTIES AND RESPONSIBILITIES.

- a. General Responsibilities.** General responsibilities are outlined in FAAO 7110.65, Tower Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
OS/CIC – Tower	CS	N/A	007

- b. Consolidated Positions.** Ensure LC, GC and CD are de-consolidated from each other during the following times:

Monday through Friday	0630 LCL – 2000 LCL
Saturday and Sunday	1000 LCL – 1800 LCL

Consolidating these positions during these time periods must be approved by a OS on a recorded line. In the event a OS is not in the facility, this authority is delegated to the OCIC. Such exceptions will be limited to periods of low traffic activity time and on a limited basis. If consolidation is approved during these time periods, notify the TS when the positions are de-consolidated..

c. Designated Runways, ATIS/Advertised Approach and LC Frequency(ies).

1. In accordance with Appendix A and after collaborating and reaching consensus with the TS, determine the designated arrival runway(s) and designated departure runway(s).
2. Coordinate the ATIS/Advertised approach with the TS and advise FD, if other than ILS.
3. Coordinate the LC frequency(ies) in use with the TS and FD, if other than 120.9.

- d. Taxi Pattern.** Determine the taxi pattern for jets and props and direct GC to taxi accordingly. During the period 1900-0700 LCL when runway 23L/R are in use, the taxi pattern shall be Quiet.

- e. CAT II and CAT III Operations.** When RVR values indicate 4000 and are trending downward and prior to conducting CAT II or CAT III operations (below RVR 1800), complete Category II and III Operations Checklist contained in Appendix B. Equipment outages (RVR, engine generators, etc.) may affect CAT II and/or CAT III availability. Detailed information is contained in Situation Binder in the TRACON and Tower.

- f. **SMGCS.** When RVR is below 1200, implement SMGCS taxi routes at your discretion. Detailed information is contained in the IND Airport SMGCS Plan located in the IND Facility Equipment/SOP Supplement Binder.
- g. **Reportable IND Delays.** Notify FD of any reportable IND delay information.
- h. **De-icing.** When notified by the IAA that the "Airport De-icing Plan is in effect":
 - 1. Implement gate hold procedures.
 - 2. Coordinate with GC and determine assigned taxi time intervals.
- i. **Evacuation.** Evacuate the Tower when average wind velocity reaches 65 knots or 78 knot gusts are reached. Wind velocity at Tower Cab height may be significantly greater than those reported at ground elevation. Exercise good judgment when considering evacuation of the Tower placing priority on employee safety.
- j. **Bird Activity.** Ensure that any reported bird strikes or trend toward an increase in bird activity on or around the airport are reported to airport management. Ensure that coordination will be accomplished with airport management for the possible issuance of NOTAM(s) when flocks of birds roost on the runways.
- k. **TFDM Stored Traffic Management Initiatives.** Ensure the dates of any TMIs stored in TFDM are updated to the current date between 1:00am local time and 5:00am local time.
- l. **Airport Surface Closures.** Ensure TFDM is updated to reflect current airport surface closures.

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(PAGES 257 - 267)**

Section 3. OSIC/OCIC – TRACON (TS)

5-3-1 DUTIES AND RESPONSIBILITIES.

- a. **General Responsibilities.** General responsibilities are outlined in FAAO 7110.65, Terminal Radar Team Position Responsibilities.

POSITION NAME	LOG IDENTIFIER	STARS TCP	RDVS
OSIC/OCIC – TRACON	TS	N/A	030

- b. **Cru-Art.** Sign employees in/out for their shift in Cru-Art as required.
- c. **Facility Log 7230-4.** All entries in the Facility Log 7230-4 shall be made using only capital letters.
- d. **Performance Metrics.**

1. Transmit runway configuration and associated AAR and ADR using the ATCSCC website on the TFMS computer. Adjust as necessary for unusual situations. Data is required for the period 0700 LCL through 2259 LCL.

ARRIVAL RUNWAY	DEPARTURE RUNWAY	VMC		LVMC		IMC ⁻²		LIMC ⁻²	
		AAR	ADR	AAR	ADR	AAR	ADR	AAR	ADR
23L and 23R	23L and 23R	52	52	42	42	36	36		
5L and 5R	5L and 5R	52	52	42	42	36	36	28	28
23R	23R	26	26	21	21	18	18		
23L	23L	26	26	21	21	18	18		
05R	05R	26	26	21	21	18	18	15	15
05L	05L	26	26	21	21	18	18	15	15
14	14	26	26	21	21	18	18		
32	32	26	26	21	21	18	18		
5R/32	5R/32	32	32	30	30	28	28		
23L/32	23L/32	32	32	30	30	28	28		
5L/14	5L/14	32	32	30	30	28	28		
23R/14	23R/14	32	32	30	30	28	28		

2. Coordinate forthcoming midnight shift cargo operations TMU initiatives with ZID TMU. Coordination shall include, but is not limited to:

- (a) Anticipated runway configuration and associated AAR and ADR.
- (b) MIT and/or speed restrictions at any specified ZID arrival fixes.

Note: These restrictions may be initiated via real time coordination with the individual ZID sectors when circumstances dictate. Real time coordination is considered an unusual circumstance and shall not be the normal method of coordination.

3. Input the CountOps hourly IND arrival and departure traffic using the ATCSCC website on the TFMS computer. Data is required for the period 0700 LCL through 2259 LCL. Data entry must be completed by 2359 LCL.
- e. **Daily Log and FPS Collection.** Collect daily logs and FPS at 2359 LCL.
 1. Place the following "Daily Logs" in the TRACON sign-in area mailbox:
 - (a) Facility Log 7230-4.
 - (b) IND Form 6040-31 (TMS Delay Record).
 - (c) PRE-DUTY WX BRIEFING LOG
 - (d) Any other pertinent documentation concerning the daily activities.
 2. Archive required FPS in the TRACON filing cabinet.
- f. **Record Delay Information.** Record reportable IND delays on IND Form 6040-31. Enter all data (Tower and TRACON) into OPSNET no later than 2359 LCL.
- g. **Document LUAW.** Make an entry in Facility Log 7230-4 when LUAW Letter of Authorization (LUAW at intersections between sunset and sunrise) is in effect and when suspended.
- h. **Document LC Visual Separation.** Make an entry in Facility Log 7230-4 when LC begins, terminates or modifies providing visual separation in accordance with this Order
- i. **Invalid and Inoperative Mode C Reporting.** In order to track and report aircraft with inoperative beacon codes or inoperative Mode C readouts whose pilots have been notified to stop (altitude) squawk, the TS shall make a MOR entry in the Facility Log 7230-4. Include the aircraft call sign, type, beacon code assigned with indicated beacon code reply or altitude assigned with indicated altitude, as appropriate (IE, "N222KB C210, assigned 4563 code indicates 5563 - STOP SQUAWK or N222KB, C210, assigned 080 indicates 120 - STOP ALTITUDE SQUAWK").
- j. **ASOS.** The weather contractor is responsible for maintenance of the ASOS. Notify the weather contractor in the event of an ASOS failure. Request observations in the event of an ASOS failure or an aircraft mishap.
- k. **DASI.** When notified by the weather contractor that the DASI altimeter is out of tolerance (+/- .03), make an entry in the Facility Log 7230-4. Notify FD the DASI is OTS. When DASI is returned to service, the TS shall compare the ASOS altimeter to the DASI altimeter. Notify FD of any correction factor.
- l. **TOWER EXPANDED AIRSPACE OPERATION (TEA).** Make an entry in Facility Log 7230-4 when TEA operations begin or terminate.
- m. **PRE-DUTY WX BRIEFING LOG PREPARATION.** Prior to 2200 local time, prepare the next day's PRE-DUTY WX BRIEFING LOG and place it at the Operations Supervisor's Desk in the TRACON.

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APPENDIX A

APPENDIX A-1. IND RUNWAY USE TABLE

TIME (LCL)	ARRIVAL RUNWAY		DEPARTURE RUNWAY	
	Preferred Designated	Secondary Designated	Preferred Designated	Secondary Designated
0700- 1900	23L, 23R	5L, 5R, 14, 32	23L, 23R	5L, 5R, 14, 32
1900- 2200	23L, 23R	5L, 5R, 14**, 32**	23L*, 23R*	5L, 5R, 14**, 32**
2200- 0600	5L, 5R	23L, 23R, 14**, 32**	23L*, 23R*	5L, 5R, 14**, 32**
0600- 0700	23L, 23R	5L, 5R, 14**, 32**	23L, 23R	5L, 5R, 14**, 32**
*	Taxi Quiet taxi pattern should be utilized.			
**	a. Designated Arrival and/or Designated Departure when necessary due to: 1. weather impacting Preferred and Secondary Designated runways. 2. closure(s) on Preferred and Secondary Designated runways or associated taxiways. b. Authorized for use as non-designated arrival and/or non-designated departure runway for props. c. Authorized for use as non-designated arrival and/or non-designated departure runway for jets when necessary due to: 1. emergency. 2. lifeguard aircraft. 3. weather. 4. aircraft operational necessity.			

APPENDIX A-2. WIND TABLE

Wind Angle (Degrees difference from RY being considered)	Max. Wind Velocity (Sustained or Gust)		Wind Angle (Degrees difference from RY being considered)	Max. Wind Velocity (Sustained or Gust)	
	DRY	NOT DRY		DRY	NOT DRY
10°	114	86	100°	20	3 (CALM)
20°	58	44	110°	20	3 (CALM)
30°	40	30	120°	14	3 (CALM)
40°	31	23	130°	10	3 (CALM)
45°	28	21	135°	9	3 (CALM)
50°	26	19	140°	9	3 (CALM)
60°	23	17	150°	8	3 (CALM)
70°	21	16	160°	7	3 (CALM)
80°	20	15	170°	7	3 (CALM)
90°	20	15	180°	7	3 (CALM)

NOTE: The information contained within this table is to be used as a guide for determining the designated arrival and designated departure runway. Other factors may be considered (weather, wind shear, braking action, taxiway closures, construction, etc.) *Source: FAAO 8400.9, dated 11/9/81.*

Example #1-Scenario and conditions: Wind 330° @ 19 knots with dry conditions.

1. RY being considered is RY 23 L/R (preferred designated based on time of day).
2. Wind angle is 100° (330°-230°).
3. Maximum wind velocity for 100° wind angle is 20 knots.
4. Preferred designated RY 23L/R is acceptable.

Example #2-Scenario and conditions: Wind 300° @ 17 knots and conditions are not dry.

1. RY being considered is RY 23 L/R (preferred designated based on time of day).
2. Wind angle is 70° (300°-230°).
3. Maximum wind velocity for 70° wind angle is 16 knots.
4. Preferred designated RY 23L/R is not recommended. The secondary designated runway (RY 32) should be designated.

Example #3-Scenario and conditions: Wind 200° @ 7 knots with dry conditions.

1. RY being considered is RY 5 L/R (preferred designated based on time of day).
2. Wind angle is 150° (200°-050°).
3. Maximum wind velocity for 150° wind angle is 8 knots.
4. Preferred designated RY 5L/R is acceptable.

Example #4-Scenario and conditions: Wind 200° @ 6 knots and conditions are not dry.

1. RY being considered is RY 5 L/R (preferred designated based on time of day).
2. Wind angle is 150° (200°-050°).
3. Maximum wind velocity for 150° wind angle is 3 knots.
4. Preferred designated RY 5L/R is not recommended.

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APPENDIX B

APPENDIX B-1. FD/CD/AD POSITION RELIEF CHECKLIST

REV. 4/27/2021

**FD, CD and AD
POSITION RELIEF CHECKLIST
RECORD YOUR RELIEF BRIEFING!**

PRE-BRIEF:

- (1) **Status Information Areas:** Applicable IDS, NOTAM and PIREP pages, etc.
- (2) **Equipment Status:** Radios (proper frequencies (de)selected), NAVAID(s), RADAR(s), etc.
- (3) **Airport Conditions/Status:** Airspace configuration, Runway(s) in use, Runway, and taxiway closures, etc.
- (4) **Flow Control:** Special programs, Reportable IND delays, etc.
- (5) **Training in Progress.**

VERBAL BRIEF:

- (6) **Weather:** Trends, SSA Altimeter updated (FD Only), AIA updated (FD Only), Windshear, ATIS, PIREP solicitation, etc.
- (7) **Airport Activities:** Snow removal, De-icing, Gate hold procedures, Braking action reports, Vehicles, etc.
- (8) **Special Activities:** Emergency, SUA, PAJ, Flight check, etc.
- (9) **Special Instructions:** VS provided by LC per SOP, etc.
- (10) **Traffic information:**
 - a. Aircraft standing by for clearance or TMU release, etc.
 - b. Coordination agreements with other positions.
 - c. FDIO amendments pending.
 - d. Communication status of all known aircraft.
 - e. UAS activity of operational importance.

NOTE- There must be at least a 2 minute overlap during each position relief briefing as follows: The specialist being relieved must spend a minimum of 2 minutes at the end of the briefing, actively engaged in position activities to ensure all pertinent information has been transferred and that any conflicts have been resolved. The relieving specialist and the specialist being relieved are responsible for the completeness and accuracy of the position relief briefing.

APPENDIX B-2. GC AND LC POSITION RELIEF CHECKLIST

REV: 04/27/2021

**GC and LC
POSITION RELIEF CHECKLIST
RECORD YOUR RELIEF BRIEFING!**

PRE-BRIEF:

- (1) **Status Information Areas:** Applicable IDS, NOTAM and PIREP pages, etc.
- (2) **Equipment Status:** Radios (proper frequencies (de)selected), NAVAID(s), RADAR(s), etc.
- (3) **Airport Conditions/Status:** Airspace configuration, Runway(s) in use, Runway and taxiway closures, Taxi pattern (Taxi Easy, Correct or Quiet), etc.
- (4) **Flow Control:** Special programs, Reportable IND delays, etc.
- (5) **Training in Progress.**

VERBAL BRIEF:

- (6) **Weather:** Trends, Windshear, ATIS, PIREP solicitation, etc.
- (7) **Airport Activities:** Snow removal, De-icing, Gate hold procedures, Braking Action reports, Vehicles, etc.
- (8) **Special Activities:** Emergency, SUA, PAJ, Flight check, etc.
- (9) **Special Instructions:** VS provided by LC per SOP, Reduced separation on final for 5R/23L, LUAW, etc.
- (10) **Verbally State Runway Status:** Unavailable, closed or occupied.
- (11) **Traffic Information:**
 - a. Status of each aircraft and/or vehicle.
 - b. Point-outs. EYE or 2R2 Blocks.
 - c. Primary targets. Non-radar operations. VFR advisory aircraft.
 - d. Aircraft affected by TMU initiatives.
 - e. Coordination agreements with other positions.
 - f. Aircraft holding or standing by for service.
 - g. Communication status of all known aircraft.
 - h. UAS activity of operational importance

NOTE- There must be at least a 2 minute overlap during each position relief briefing as follows: The specialist being relieved must spend a minimum of 2 minutes at the end of the briefing, actively engaged in position activities to ensure all pertinent information has been transferred and that any conflicts have been resolved. The relieving specialist and the specialist being relieved are responsible for the completeness and accuracy of the position relief briefing.

APPENDIX B-3. RADAR POSITION RELIEF CHECKLIST

REV. 04/27/2021

POSITION RELIEF CHECKLIST

RECORD YOUR RELIEF BRIEFING!

PRE-BRIEF:

- (1) **Status Information Areas:** Applicable IDS, NOTAM and PIREP pages, etc.
- (2) **Equipment Status:** Radios (proper frequencies (de) selected, NAVAID(s), RADAR(s), etc.)
- (3) **Airport Conditions/Status:** Airspace Configuration, Runway(s) in use, Runway and taxiway closures, etc.
- (4) **Flow Control:** Special programs, Reportable IND delays, etc.
- (5) **Training in Progress.**

VERBAL:

- (6) **Radar Source Being Utilized.**
- (7) **Weather:** Trends, Windshear, ATIS, PIREP solicitation, etc.
- (8) **Airport Activities:** Snow removal, De-icing, Braking action reports, etc.
- (9) **Special Activities:** Emergency, SUA, PAJ, Flight check, etc.
- (10) **Special Instructions:** VS provided by LC per SOP, Reduced separation on final for 5R/23L, etc.
- (11) **Verbally State Runway Status:** Unavailable or closed.
- (12) **Traffic Information:**
 - a. Status of each aircraft.
 - b. Point-outs. EYE or 2R2 Blocks.
 - c. Primary targets. Non-radar operations. VFR advisory aircraft.
 - d. Aircraft released but not airborne.
 - e. Aircraft handed-off but still in airspace.
 - f. Coordination agreements with other positions.
 - g. Aircraft holding or standing by for service.
 - h. Communication status of all known aircraft.
 - i. UAS activity of operational importance

NOTE- There must be at least a 2 minute overlap during each position relief briefing as follows: The specialist being relieved must spend a minimum of 2 minutes at the end of the briefing, actively engaged in position activities to ensure all pertinent information has been transferred and that any conflicts have been resolved. The relieving specialist and the specialist being relieved are responsible for the completeness and accuracy of the position relief briefing.

APPENDIX B-4. CS AND TS POSITION RELIEF CHECKLIST

REV. 04/27/2021

CS and TS
POSITION RELIEF CHECKLIST
RECORD YOUR RELIEF BRIEFING!

PRE-BRIEF:

- (1) **Status Information Areas:** Applicable IDS, NOTAM and PIREP pages, etc.
- (2) **Equipment Status:** Radios, NAVAID(s), RADAR(s), etc.
- (3) **Airport Conditions/Status:** Airspace Configuration, Runway(s) in use, Runway, and taxiway closures, etc.
- (4) **Flow Control:** Special programs, Reportable IND delays, etc.

VERBAL BRIEF:

- (5) **Staffing.** T&A status, Other duties, TOS requests/approvals, Leave requests/approvals
- (6) **Training in Progress.**
- (7) **Radar Source Being Utilized.**
- (8) **Weather:** Trends, Windshear, ATIS, PIREP solicitation, etc.
- (9) **Airport Activities:** Snow removal, De-icing, Gate hold procedures, Braking action reports, etc.
- (10) **Special Activities:** Emergency, SUA, PAJ, Flight check, etc.
- (11) **Special Instructions:** VS provided by LC per SOP, Reduced separation on final for 5R/23L, Training objectives, etc.
- (12) **Communication status of all known aircraft.**
- (13) **Verbally State Runway Status:** Unavailable, closed or occupied.
- (14) **Traffic Information.**
 - a. UAS activity of operational importance.

NOTE- There must be at least a 2 minute overlap during each position relief briefing as follows: The specialist being relieved must spend a minimum of 2 minutes at the end of the briefing, actively engaged in position activities to ensure all pertinent information has been transferred and that any conflicts have been resolved. The relieving specialist and the specialist being relieved are responsible for the completeness and accuracy of the position relief briefing.

APPENDIX B-5. WATCH SUPERVISION – RUNWAY CHANGE CHECKLIST

REV. 05/15/23

**WATCH SUPERVISION (CS and TS)
RUNWAY CHANGE CHECKLIST**

- (1) CS.
- (a) Coordinate with TS on a recorded line.
 - (b) Determine and identify the new runway configuration (IE, “5’s”, “23’s”, “in one/out both”, etc.).
 - (c) Identify the last departure off of the previous designated departure runway.
 - (d) Confirm the last arrival to the previous designated arrival runway.
 - (e) Confirm the first arrival to the new designated arrival runway.
 - (f) Configure localizers, approach lighting, runway lighting, taxiway lighting, TFDM, ITWS, TBFM/IDAC Computer, 5L/5R FFM(s) and ensure IDS is updated.
 - (g) Ensure updated ATIS.
- (2) TS.
- (a) Coordinate with CS on a recorded line.
 - (b) Confirm the new runway configuration (IE, “5’s”, “23’s”, “in one/out both”, etc.).
 - (c) Confirm the last departure off of the previous designated departure runway.
 - (d) Identify the last arrival to the previous designated arrival runway.
 - (e) Identify the first arrival to the new designated arrival runway.
 - (f) Configure STARS, CRDA (to include the new designated arrival runway(s)), EFSTS. Ensure IDS, 5L/5R FFM(s) are properly configured.
 - (g) As required, notify surrounding facilities of new runway configuration.
 - (h) Transmit new runway configuration and new AAR/ADR using the ATCSCC website on the TFMS computer.
 - (i) Make entry in the Facility Log 7230-4.

APPENDIX B-6. WATCH SUPERVISION – EQUIPMENT CHECKLIST

WATCH SUPERVISION (CS and TS)
EQUIPMENT CHECKLIST

REV. 02/12/21

(1) CS. Notify the TS when the checklist has been completed.**Shift:** 0800 LCL, 1600 LCL and 2400 LCL:

- (a) Light guns.
- (b) ILS.
- (c) Test MSAW speaker volume on each TDW. **STARS entry: F7,Z,A,enter.**
- (d) 5L/5R FFM(s). Ensure the 5L/5R FFM(s) are properly configured.
- (e) Approach light engine generators. Ensure the 5L/R approach light engine generators are properly configured.
- (f) Lights. Approach lights, runway lights and taxiway lights.
- (g) Rotating beacon.
- (h) STARS components (TDW, keyboard, radar quality, etc.).
- (i) Radar Source Being Utilized.

Daily:

- (a) Crash Phone Check (Make “heads-up” call prior to check at 0715 LCL. The “heads up” call shall be made via Airport Dispatch hand held radio, when available, otherwise via commercial telephone.)
- (b) PET-2000. Check on both battery and electric power (check will be made at 0800).
- (c) Re-Boot the TBFM/IDAC Computer. (this procedure will be completed by 0800).

Weekly: Manual ATIS (check each Sunday morning).**(2) TS.****Shift:** 0800 LCL, 1600 LCL and 2400 LCL:

- (a) DVRS Recorder Alarm.
- (b) Test MSAW speaker volume on each TCW. **STARS entry: F7,Z,A,enter.**
- (c) 5L/5R FFM(s). Ensure the 5L/5R FFM(s) are properly configured.
- (d) Approach light engine generators. Ensure the 5L/5R approach light engine generators are properly configured.
- (e) STARS components (TCW, keyboard, radar quality, etc.).
- (f) Make an entry (“WCLC”) in the Facility Log 7230-4 when the watch checklists have been completed.

Daily:

- (a) PET-2000. Check on both battery and electric power (check will be made at 0800).
- (b) Acquire (via AISR) IND airport, IND satellite airport and IND FDC NOTAM Summaries. (acquire at 0800).
- (c) Acquire GENOT information from AISR and distribute as appropriate.
- (d) Acquire (via SAMS) R3401, R3403, JPEG MOA activity. (acquire at 0600, and regularly throughout each shift, as necessary).
- (e) DASI-Compare the DASI to the ASOS 1 Minute altimeter setting. If the difference is 0.03 in Hg. or more, remove the DASI from service and notify Tech Ops.

Monthly:

- (a) On the 1st day of the month, review the Operational Currency Dashboard and take appropriate action for all employees that are no longer current.
- (b) Prior to the 20th day of the month, review the Operational Currency Dashboard before each shift and notify employees who have not yet met their currency requirements for the month.

**APPENDIX B-7. WATCH SUPERVISION – CATEGORY II AND III OPERATIONS
CHECKLIST**

REV. 10/21/17

**WATCH SUPERVISION (CS and TS)
CATEGORY II and III OPERATIONS CHECKLIST**

The following actions should be initiated when RVR values indicate 4000 and are trending downward and must be completed prior to conducting CAT II or CAT III operations (below RVR 1800):

- (1) CS.
 - (a) Properly configure approach (ALSF), runway and taxiway lights.
 - (b) Ensure a visual inspection of the runway lighting system (edge, centerline and touchdown lighting) by the IAA. Inspections are to occur every 2 hours while CAT II or CAT III operations are being conducted.
 - (c) Start the runway 5L and 5R approach light system generators via the ICMS. **Note: Return the approach light system to commercial power when CAT II and CAT III operations are terminated and RVR is trending upward.** (When the ALS EG is turned off for either runway, it continues to run in a cool down mode for approximately 15 minutes).
 - (d) Ensure the 5L/5R FFM(s) are operational. (IE, NOT in bypass). Verify the ICMS indicates CAT II or CAT III (as appropriate) signal integrity.
 - (e) Notify the TS when the checklist has been completed.
- (2) TS.
 - (a) Verify the runway 5L and 5R approach light system generators are on via the ICMS.
 - (b) Verify the 5L/5R FFM(s) are properly configured. (IE, NOT in bypass). Verify the ICMS indicates CAT II or CAT III (as appropriate) signal integrity.

APPENDIX B-8. STARS FSL/DSA TRANSITION PROCEDURE CHECKLIST

REV. 10/21/17

STARS FSL/DSA Transition Procedure Checklist

- (1) **Planned transition to DSA.** The CS/TS is the transition decision authority and must be consulted prior to any planned STARS transition. Specialists shall ensure that all potential traffic conflicts are detected and resolved. Ensure traffic is manageable prior to any planned STARS transition.
- (2) **Unplanned transition to DSA.**
- (a) If able, refer to another TCW/TDW to maintain continuity of ATC Services.
 - (b) Enter DSA Mode 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
 - Using the keyboard:
 - Press and hold down the keyboard <F16> key and the letter “D” at the same time
 - (c) Notify the CS/TS.
 - (d) Advise Tower “Stop/Resume departures”, as necessary.
 - (e) Advise Tower to DM departures while in DSA.
 - (f) Assign aircraft on NAS flight plans the NAS-assigned discrete beacon code as in STARS FSL operation.
 - (g) Assign aircraft not on NAS flight plans a discrete local beacon code. The beacon code must be chosen by the specialist. DSA will not assign codes. **IFR: 0201 – 0237 VFR: 0301 – 0377**
 - (h) Manually HO all aircraft. Reference the assigned beacon code in all HO. Beacon code/ACID is not transmitted between positions.
- (3) **Transition back to FSL.** Return to FSL Mode by:
- 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
 - Using the keyboard:
 - Press and hold down the keyboard <F16> key and the letter “D” at the same time
 - Notify the CS/TS.
- (4) **If FSL and DSA are unavailable, implement facility contingency plans.**

APPENDIX B-9. TRACAB TRANSITION PROCEDURE CHECKLIST

REV. 3/29/18

STARS TRACAB Transition Procedure Checklist**TO OPEN TRACAB:****(1) STARS Scope Configuration.**

(A.) Configure for TRACAB=[MULTI FUNC],C,TWT,[ENTER]. All handoffs default to the LCC/GCC "T" scope. Then, configure Tower STARS as desired.

(2) RDVS:

(A.) Ensure all TRACON RDVS's, including the TS and AD are FWD to same TRACON RDVS (this will most likely be DRE - #013.)

(B.) FWD last remaining TRACON RDVS position (typically DRE) to desired Tower position. (FD - #005, LCC/GCC - #008, etc.).

(3) COMMERCIAL TELEPHONE:

(A.) Call forward OS commercial telephone to Tower Cab commercial phone.

(4) Call ZID Flight Data: [REDACTED]

(A.) Advise them to send the FDIO flight plans to the Tower only, (all flight plans to INDY).

TRACON Re-Configuration**To Re-open TRACON:****(1) STARS Scope Configuration.**

(A.) Configure TRACON using normal entry = [MULTI FUNC],C,R##,[ENTER]. Then enter = F16,C,#.

(2) RDVS.

(A.) Re-open AD and TS RDVS by pressing the FWD button.

(B.) Re-open single TRACON RDVS by pressing the FWD button. This will most likely be at DRE.

(3) COMMERCIAL TELEPHONE:

(A.) (A.) Un-forwarded OS commercial phone from the Tower Cab commercial phone.

(4) Call ZID Flight Data: [REDACTED]

(A.) Advise them to send the FDIO flight plans to the TRACON and Tower.

**APPENDIX B-10. WATCH SUPERVISION (CS) NOTAMed RUNWAY
CLOSING/OPENING CHECKLIST**

REV. 05/15/23

WATCH SUPERVISION (CS)

NOTAMed RUNWAY CLOSING/OPENING CHECKLIST

- (1) Closing Runway.
 - (a) Coordinate with IAA.
 - 1. Obtain duration of closure including estimated time of reopening.
 - 1. Determine if low approaches are authorized.
 - 2. Determine which portions of closed runway are available for taxiing and crossing.
 - (b) Coordinate with TS on a recorded line.
 - 1. Advise of closure including estimated time of reopening.
 - 2. Coordinate any special MIT requirements for open runway(s).
 - (c) Configure: ILS for closed runways (IE, both the 5L and 23R ILS should be off if those runways are closed), approach lighting and runway lighting and TFDM.
 - (d) Ensure IDS and ATIS are updated.
 - (e) Ensure memory aid status at LC and GC is accurate.
- (2) Opening Runway.
 - (a) Coordinate with IAA. Confirm reopening.
 - (b) Coordinate with TS on a recorded line. Advise of reopening.
 - (c) Configure: ILS for opening runway, approach lighting and runway lighting and TFDM.
 - (d) Ensure IDS and ATIS are updated.
 - (e) Ensure memory aid status at LC and GC is accurate.

**APPENDIX B-11. WATCH SUPERVISION (TS) NOTAMed RUNWAY
CLOSING/OPENING CHECKLIST**

REV. 10/14/14

**WATCH SUPERVISION (TS)
NOTAMed RUNWAY CLOSING/OPENING CHECKLIST**

- (1) Closing Runway.**
 - (a)** Coordinate with CS on a recorded line.
 - 1. Obtain duration of closure including estimated time of reopening.
 - 2. Obtain any special MIT requirements for open runway(s).
 - (b)** Verbally notify all TRACON positions of runway closure.
 - (c)** Coordinate any TMU initiatives with ZID/ZAU TMU on a recorded line.
 - (d)** Make entry in the Facility Log 7230-4.
- (2) Opening Runway.**
 - (a)** Coordinate with CS on a recorded line. Confirm reopening.
 - (b)** Verbally notify all TRACON positions of runway opening.
 - (c)** Coordinate any TMU initiatives with ZID/ZAU TMU on a recorded line.
 - (d)** Make entry in the Facility Log 7230-4.

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APPENDIX C

APPENDIX C. AUTHORIZED IND ARRIVAL FULL DATA BLOCK (FDB)
SCRATCHPAD DATA

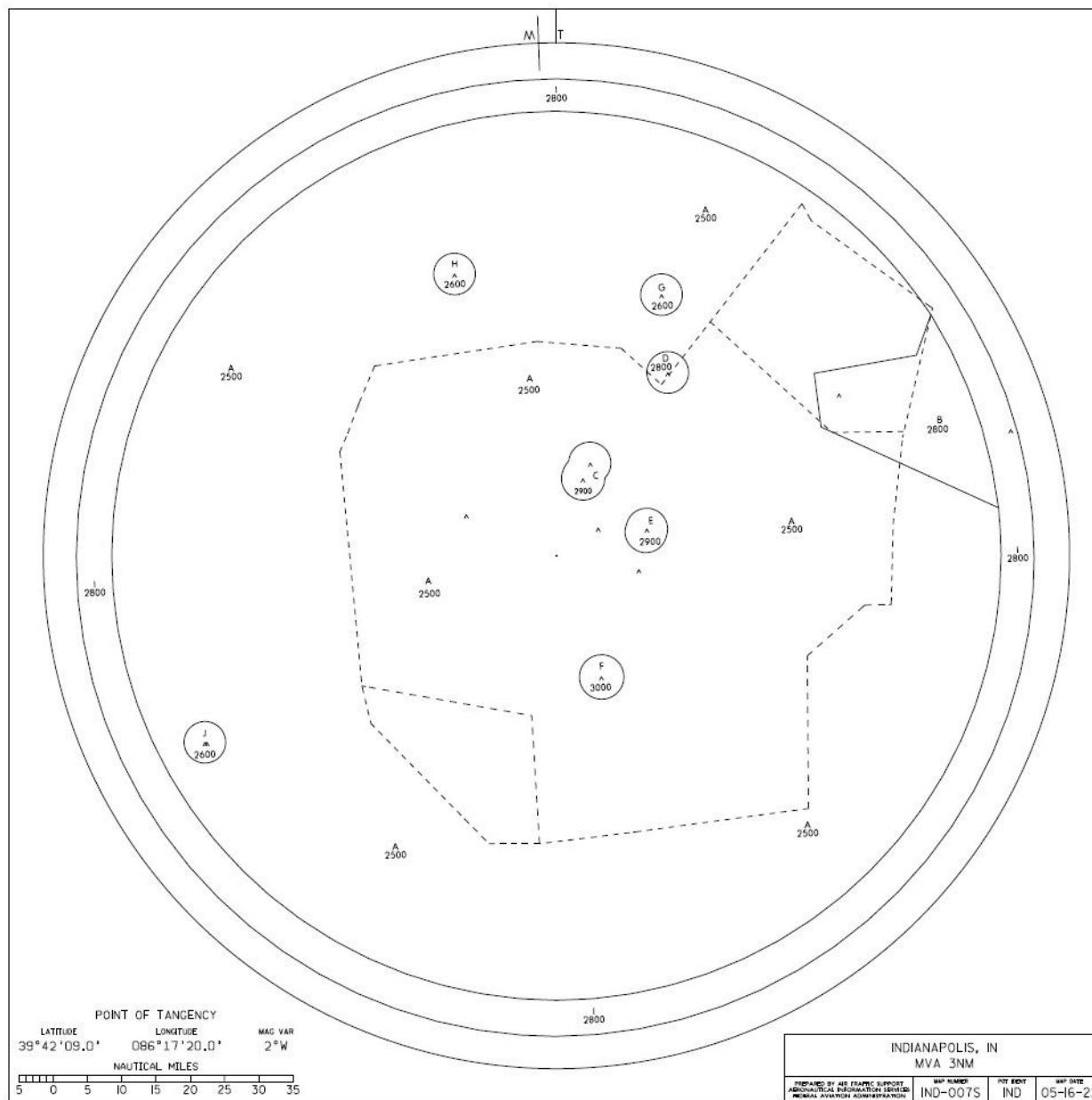
SCRATCH-PAD DATA		STARS KEYBOARD ENTRY (slew, enter)	MEANING
Runway Assignment Data – Secondary Scratchpad	"L"	"+L"	The aircraft is assigned the "Left" designated parallel arrival runway.
	"R"	"+R"	The aircraft is assigned the "Right" designated parallel arrival runway.
	"R5L"	"+R5L"	The aircraft is assigned non-designated arrival runway 5L.
	"R5R"	"+R5R"	The aircraft is assigned non-designated arrival runway 5R.
	"23L"	"+23L"	The aircraft is assigned non-designated arrival runway 23L.
	"23R"	"+23R"	The aircraft is assigned non-designated arrival runway 23R.
	"R14"	"+R14"	The aircraft is assigned non-designated or designated arrival runway 14.
	"R32"	"+R32"	The aircraft is assigned non-designated or designated arrival runway 32.
	"UW"	"+UW"	The aircraft is excluded from ATPA processing and will have assigned arrival runway displayed when ATPA processing can resume.
Approach Type Data – Primary Scratchpad	None	None	The aircraft has been cleared for the ATIS/Advertised approach to the designated arrival runway.
	"VA"	"VA"	The aircraft has been cleared for a visual approach.
	"VS"	"VS"	IFR: The aircraft has reported the preceding aircraft to the same runway in sight and has been instructed to follow it for a visual approach.
			VFR: The aircraft has reported the preceding aircraft to the same runway in sight, has been instructed to follow it and maintain visual separation (when applicable for wake turbulence separation).
	"VP"	"VP"	IFR: The aircraft: 1) has been cleared for a visual approach. 2) is maintaining visual separation with the nearest preceding aircraft to the parallel runway at the time of communications transfer.
			VFR: The aircraft is maintaining visual separation with the nearest preceding aircraft to the parallel runway at the time of communications transfer (when applicable for wake turbulence separation).
	"VB"	"VB"	IFR: The aircraft: 1) has reported the preceding aircraft to the same runway in sight and has been instructed to follow it for a visual approach. 2) is maintaining visual separation with the nearest preceding aircraft to the parallel runway at the time of communications transfer.
			VFR: The aircraft: 1) has reported the preceding aircraft to the same runway in sight, has been instructed to follow it and maintain visual separation (when applicable for wake turbulence separation). 2) is maintaining visual separation with the nearest preceding aircraft to the parallel runway at the time of communications transfer (when applicable for wake turbulence separation).
	"CT2"	"CT2"	The aircraft has been cleared for an ILS approach
	"CT2"	"CT2"	The aircraft has been cleared for a Category II ILS approach.
	"CT3"	"CT3"	The aircraft has been cleared for a Category III ILS approach.
	"RNV"	"RNV"	The aircraft has been cleared for an RNAV approach.
	"T/G"	"T/G"	The aircraft is requesting touch and go, stop and go or low approach.
	"MIL"	"MIL"	The aircraft is parking/landing at Million Air FBO.
	"HAW"	"HAW"	The aircraft is parking/landing at Hawker Beechcraft.
	"SIG"	"SIG"	The aircraft is parking/landing at Signature FBO.
	"TSA"	"TSA"	The aircraft is parking/landing at Customs at the terminal.
	"IAB"	"IAB"	The aircraft is parking/landing at the IAB.
	"IMC"	"IMC"	The aircraft is parking/landing at the IMC ¹ .
	"ODO"	"ODO"	The aircraft is conducting an Opposite Direction Operation.
	"NR"	"NR"	The aircraft is on a conventional arrival.

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(PAGES 317 - 327)**

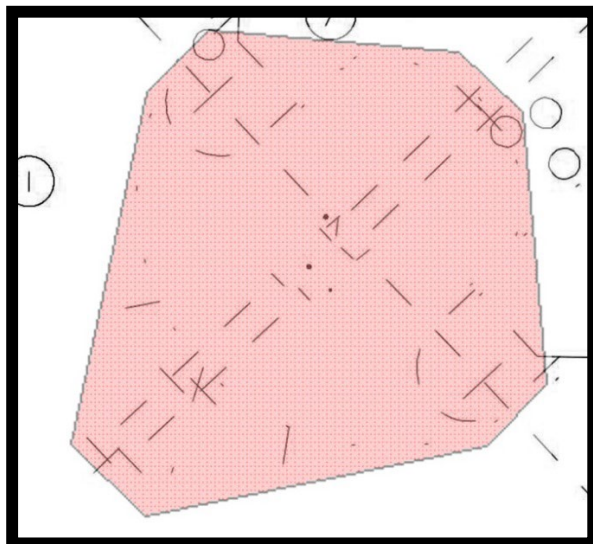
APPENDIX D

APPENDIX D-1. MINIMUM VECTORING ALTITUDE (MVA) MAPS

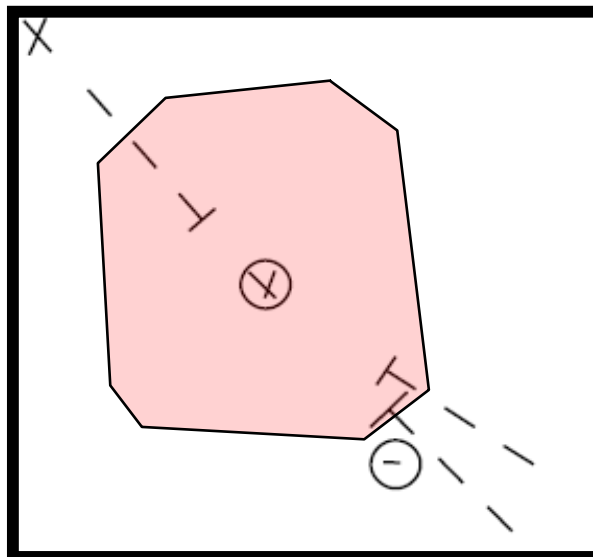
a. 3NM Minimum Vectoring Altitude Map



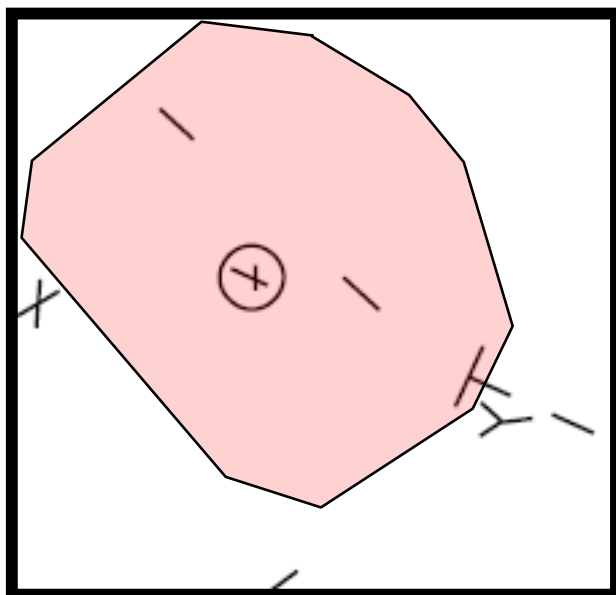
**APPENDIX D-2. TOWER MINIMUM SAFE ALTITUDE WARNING (MSAW)
AURAL ALARM GEOGRAPHIC BOUNDARIES**



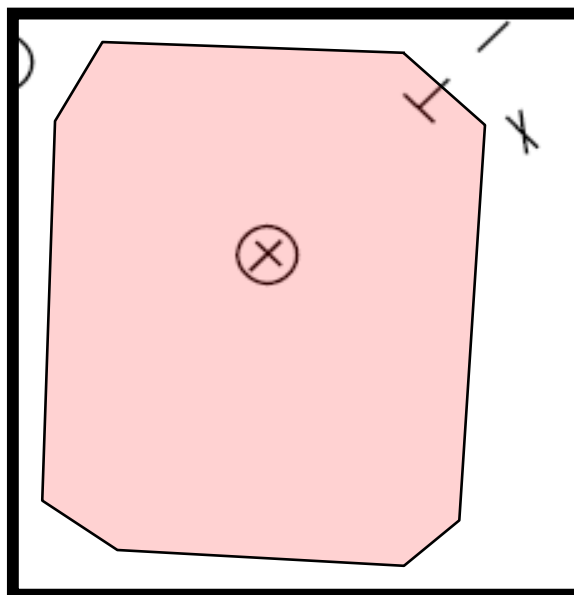
INDIANAPOLIS AIRPORT



MUNCIE AIRPORT



ANDERSON AIRPORT

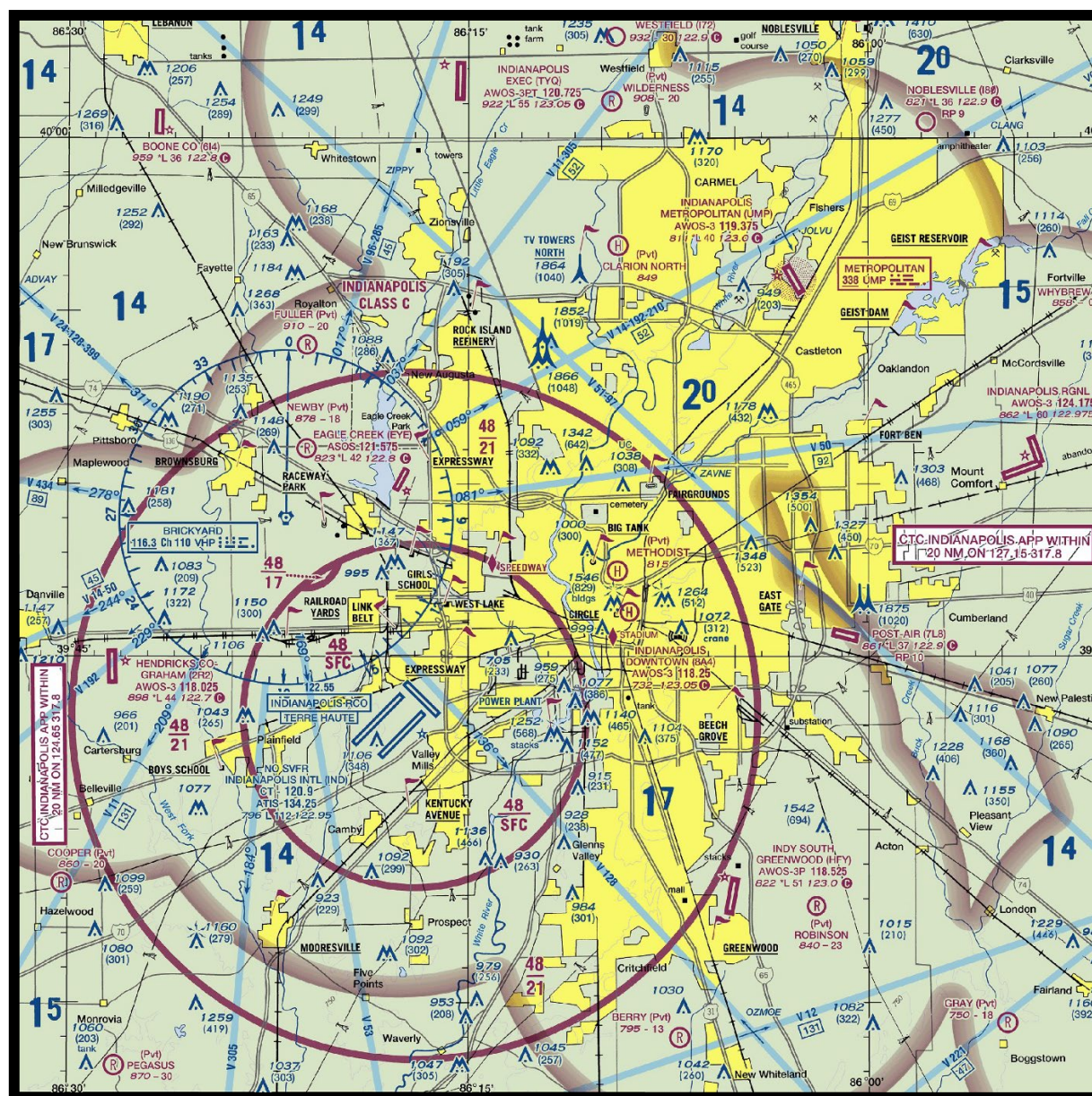


COLUMBUS AIRPORT

An aircraft will generate an MSAW aural alarm when the aircraft:

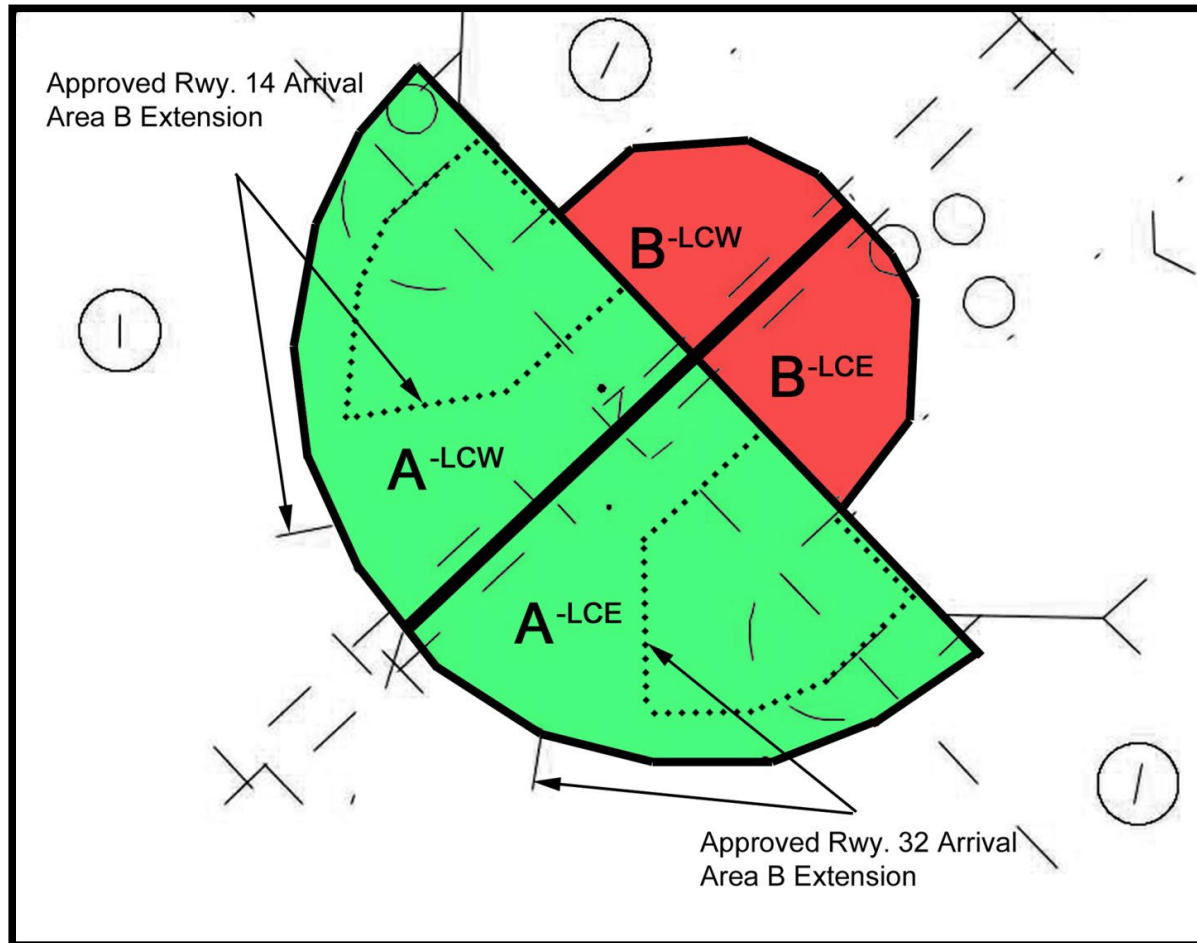
1. is within the lateral confines of a boundary, and
2. is at or below 5,000 MSL, and
3. has a projected flight path that terminates prior to the airport boundary.

APPENDIX D-3. CLASS C AIRSPACE



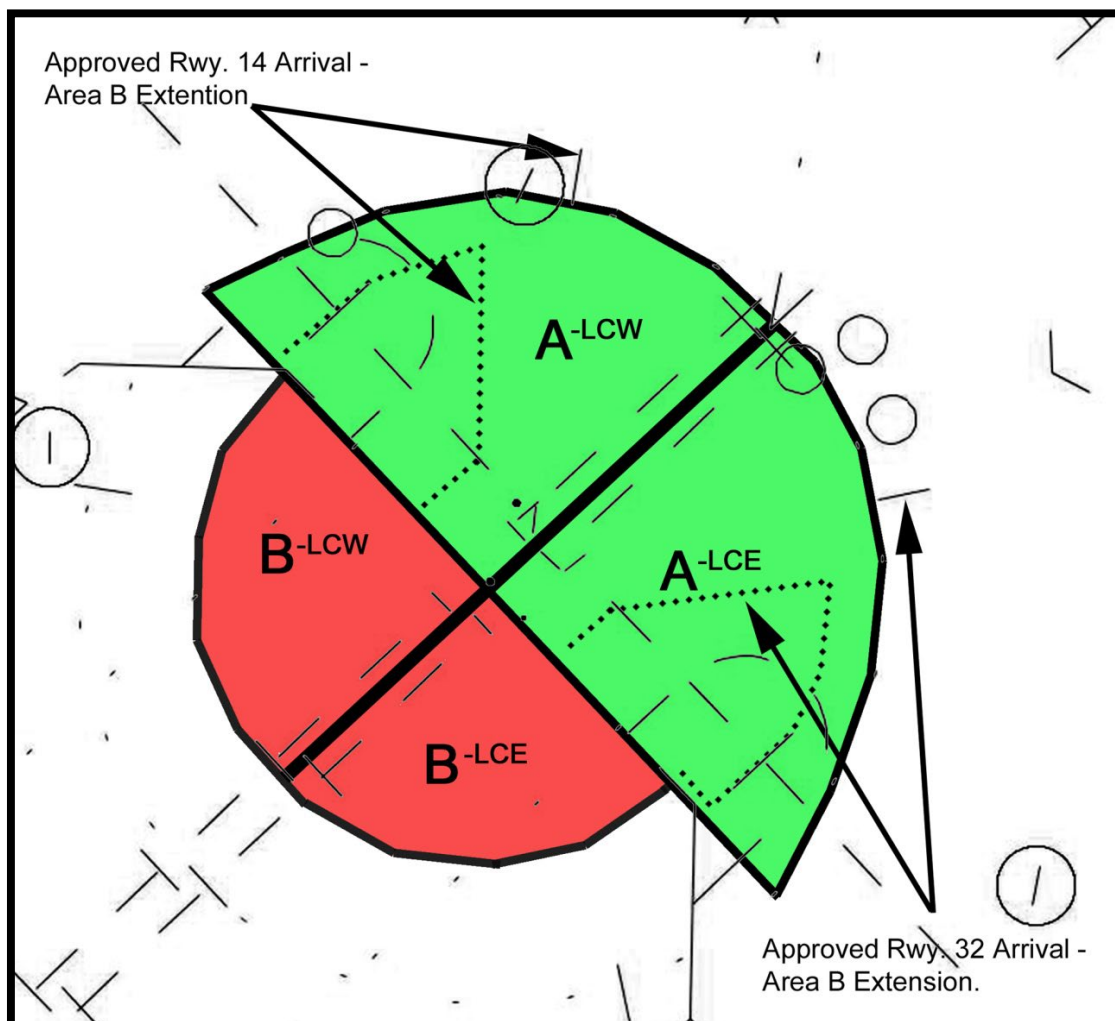
NOTE: FOR CONTROLLER REFERENCE ONLY. NOT FOR LIVE ATC USE.

**APPENDIX D-4. TOWER SURFACE AREA OF RESPONSIBILITY:
RUNWAY 23**



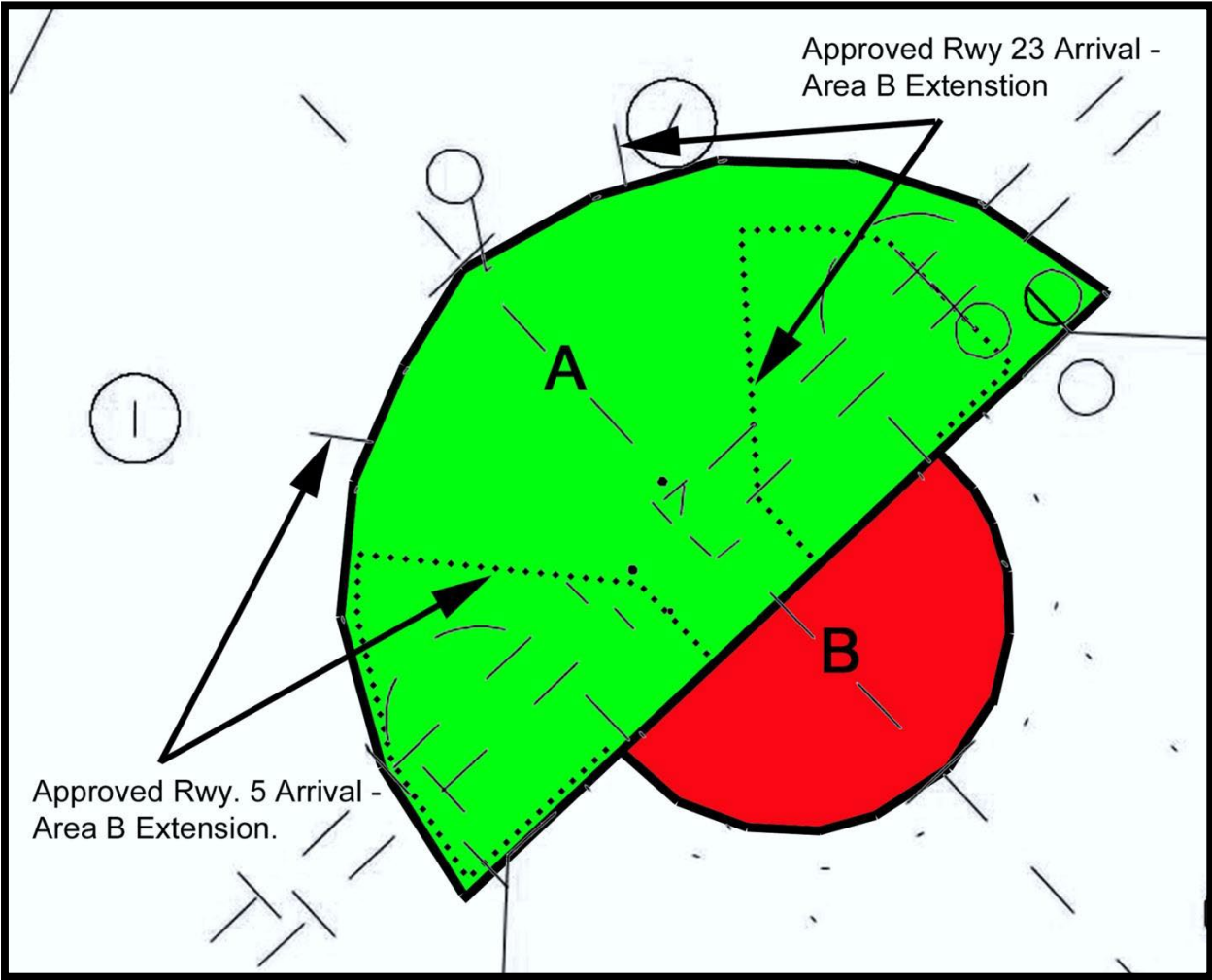
A-LCW	LCW	SFC to 030	A-LCE	LCE	SFC to 030
B-LCW	LCW	SFC to 015	B-LCE	LCE	SFC to 015

APPENDIX D-5. TOWER SURFACE AREA OF RESPONSIBILITY: RUNWAY 5



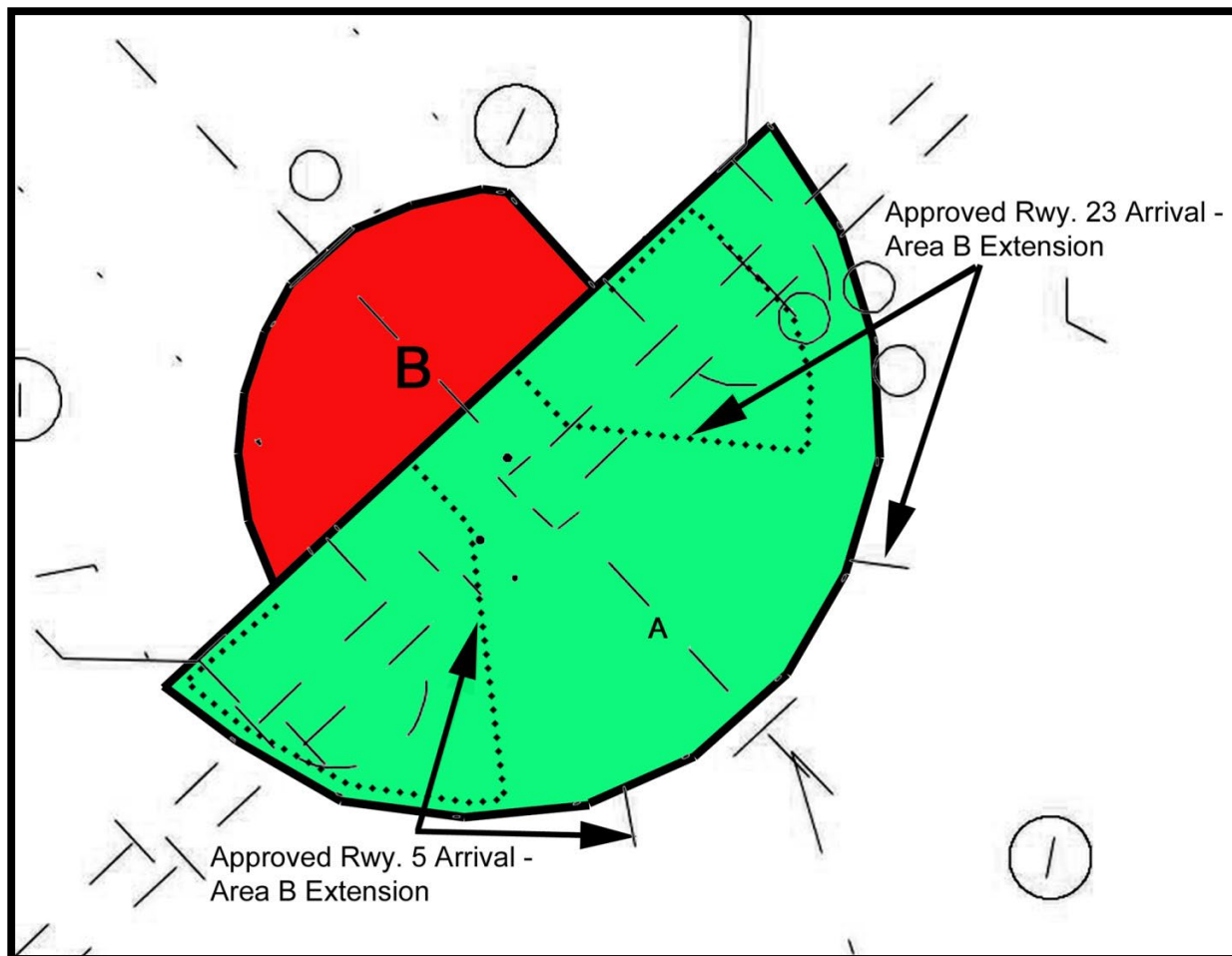
A-LCW	LCW	SFC to 030	A-LCE	LCE	SFC to 030
B-LCW	LCW	SFC to 015	B-LCE	LCE	SFC to 015

APPENDIX D-6. TOWER SURFACE AREA OF RESPONSIBILITY:
RUNWAY 32



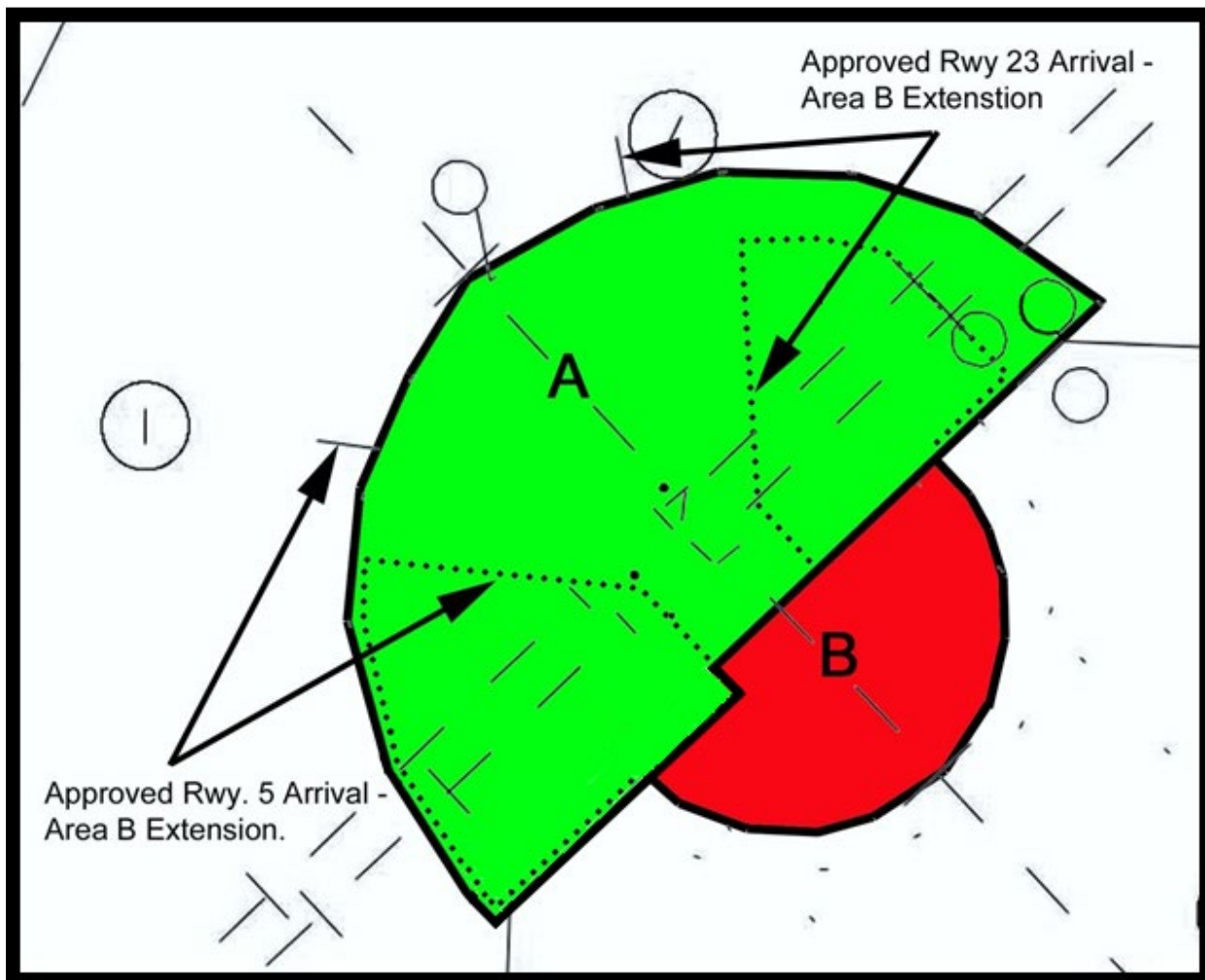
A	LC	SFC to 030	B	LC	SFC to 015
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**APPENDIX D-7. TOWER SURFACE AREA OF RESPONSIBILITY:
RUNWAY 14**

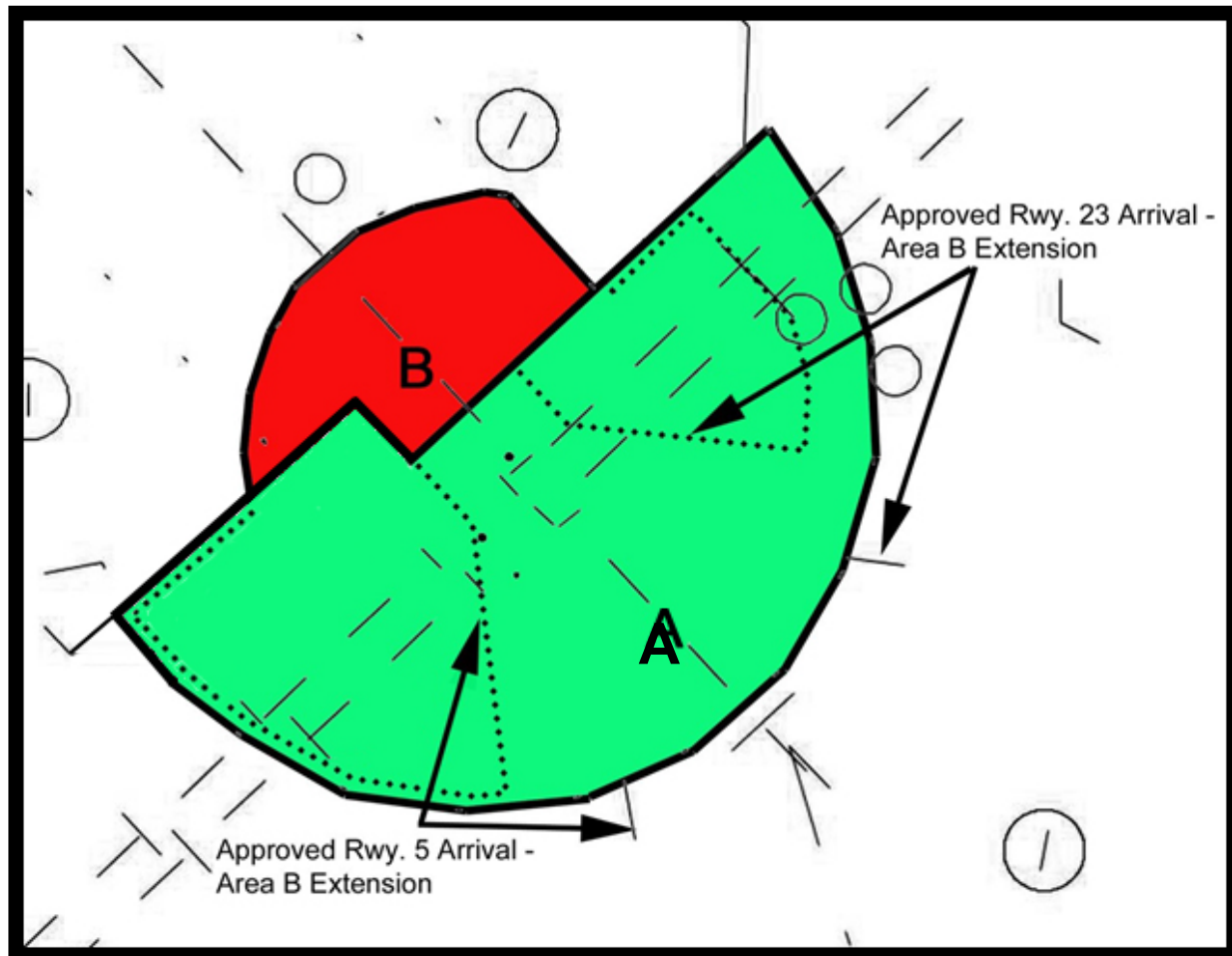


A	LC	SFC to 030	B	LC	SFC to 015
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**APPENDIX D-8. TOWER SURFACE AREA OF RESPONSIBILITY:
TOWER EXPANDED AIRSPACE OPERATION - RUNWAY 32**

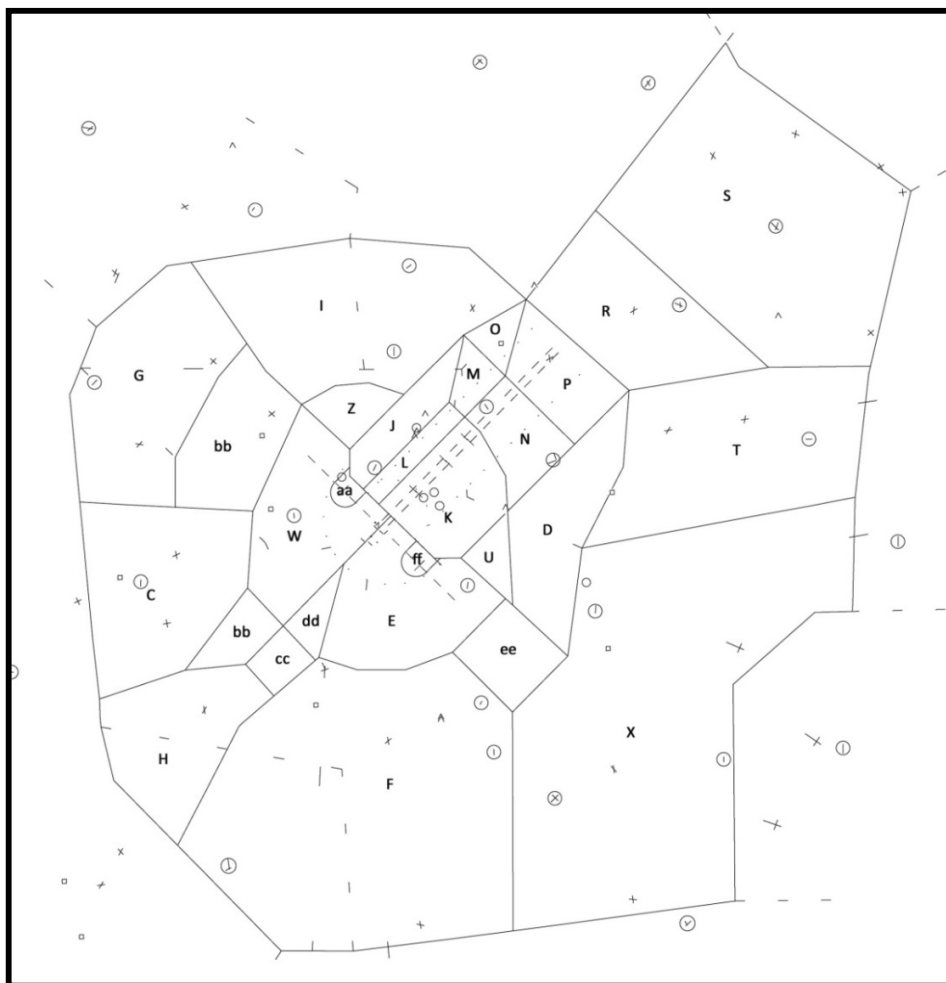


**APPENDIX D-9. TOWER SURFACE AREA OF RESPONSIBILITY:
TOWER EXPANDED AIRSPACE OPERATION - RUNWAY 14**



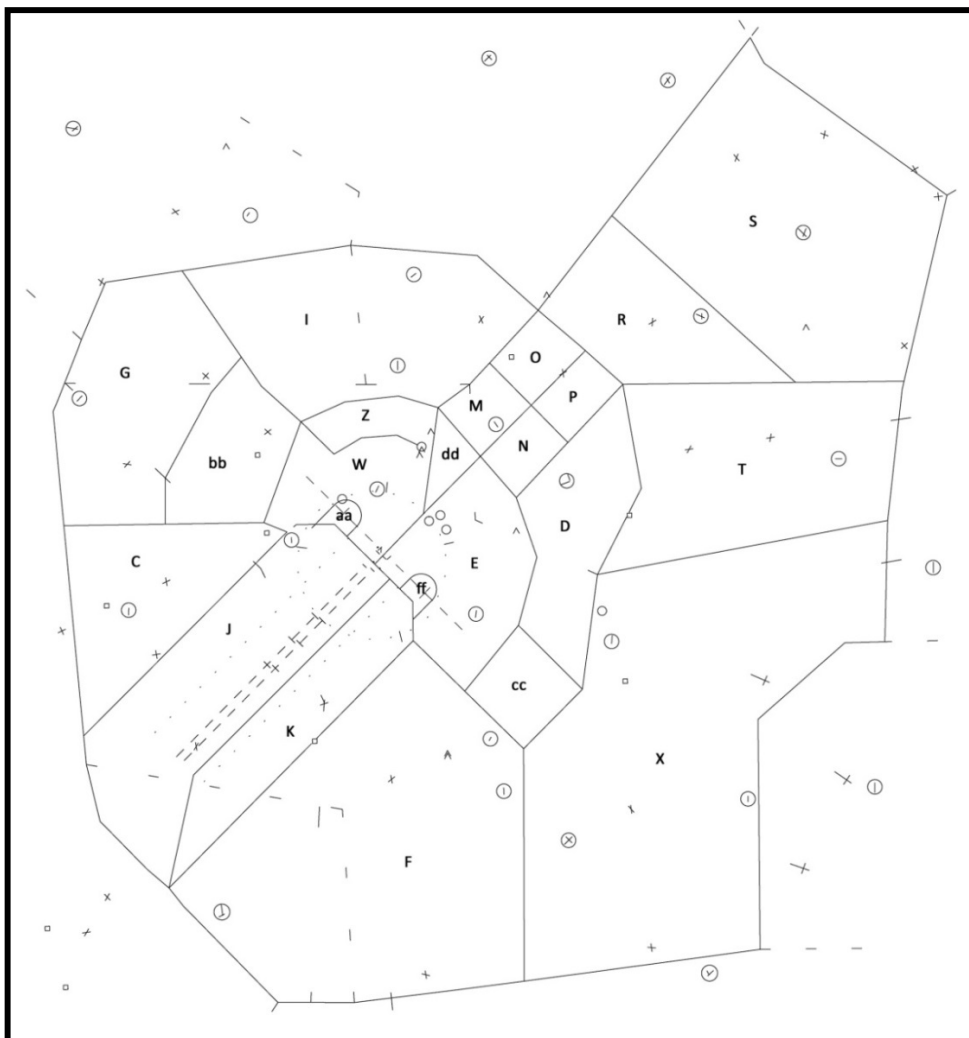
A	LC	SFC to 030	B	LC	SFC to 015
---	----	------------	---	----	------------

APPENDIX D-10. DELEGATED AIRSPACE – TRACON: RUNWAY 23 COMPOSITE



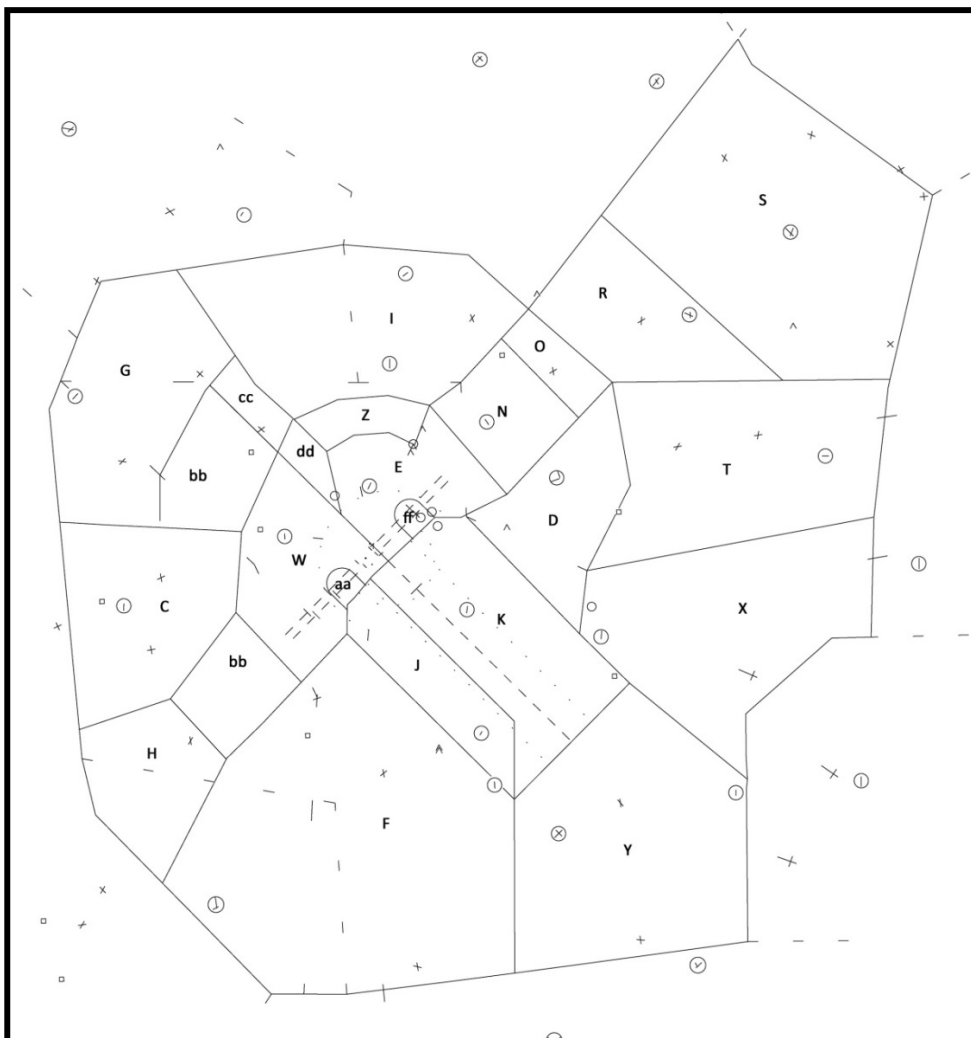
C	DRW	SFC to 130	D	STS DRE	SFC to 050 055 to 130	E	DRE FRD	SFC to 050 055 to 130
F	DRE	SFC to 130	G	DRW FRB	SFC to 090 095 to 130	H	DRE FRB	SFC to 090 095 to 130
Excludes HUF - BMG Airspace SFC to 050						Excludes HUF - BMG Airspace SFC to 050		
I	STN DRW	SFC to 050 055 to 130	J	STN FNI FRB	SFC to 030 035 to 060 065 to 130	K	FNF FRD	SFC to 060 065 to 130
L	FNI FRB	SFC to 060 065 to 130	M	STS FNI FRB	SFC to 030 035 to 060 065 to 130	N	STS FNF FRD	SFC to 030 035 to 060 065 to 130
O	STS FNI FRB	SFC to 040 045 to 060 065 to 130	P	STS FNF FRD	SFC to 040 045 to 060 065 to 130	R	STS FRD	SFC to 060 065 to 130
S	STS FRD	SFC to 090 095 to 130	T	STS DRE	SFC to 090 095 to 130	U	DRE	SFC to 130
W	DRW FRB	SFC to 050 055 to 130	X	STS FRD	SFC to 090 095 to 130	Z	STN DRW	SFC to 030 035 to 130
aa	DRW FNI FRB	SFC to 030 035 to 060 065 to 130	bb	DRW FRB	SFC to 060 065 to 130	cc	DRE FRB	SFC to 060 065 to 130
dd	DRE FRB	SFC to 050 055 to 130	ee	DRE FRD	SFC to 060 065 to 130	ff	DRE FNF FRD	SFC to 030 035 to 060 065 to 130

APPENDIX D11. DELEGATED AIRSPACE – TRACON: RUNWAY 5 COMPOSITE

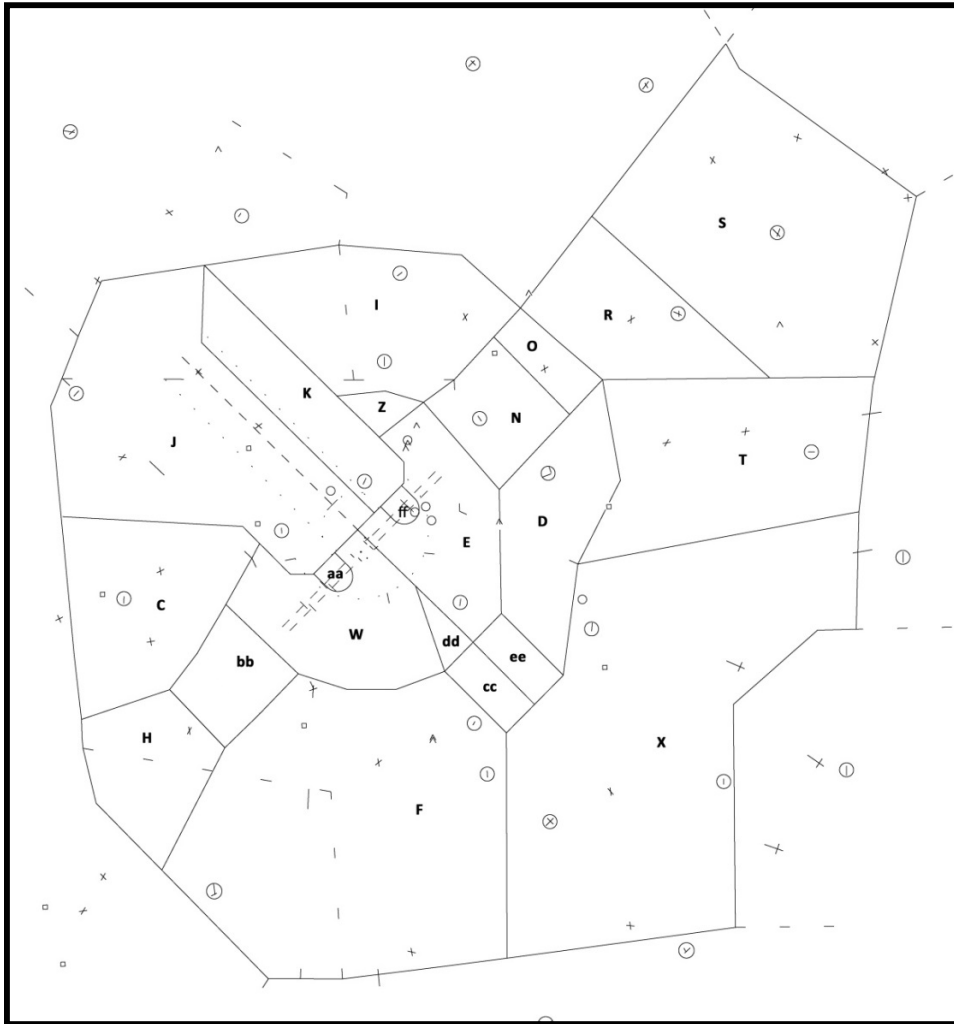


C	DRW	SFC to 130	D	STS DRE	SFC to 050 055 to 130	E	DRE FRD	SFC to 050 055 to 130
F	DRE	SFC to 130 Excludes HUF - BMG Airspace SFC to 050	G	DRW FRB	SFC to 090 095 to 130	I	STN DRW	SFC to 050 055 to 130
J	FNI FRB	SFC to 060 065 to 130 Excludes HUF - BMG Airspace SFC to 050	K	FNF FRD	SFC to 060 065 to 130 Excludes HUF - BMG Airspace SFC to 050	M	STS DRW FRD	SFC to 050 055 to 060 065 to 130
N	STS DRE FRD	SFC to 050 055 to 060 065 to 130	O	STS DRW FRD	SFC to 050 055 to 090 095 to 130	P	STS DRE FRD	SFC to 050 055 to 090 095 to 130
R	STS FRD	SFC to 090 095 to 130	S	STS FRD	SFC to 090 095 to 130	T	STS DRE	SFC to 090 095 to 130
W	DRW FRB	SFC to 050 055 to 130	X	STS FRD	SFC to 090 095 to 130	Z	STN DRW FRB	SFC to 030 035 to 050 055 to 130
aa	DRW FNI FRB	SFC to 030 035 to 060 065 to 130	bb	DRW FRB	SFC to 060 065 to 130	cc	DRE FRD	SFC to 060 065 to 130
dd	DRW FRD	SFC to 050 055 to 130				ff	DRE FNF FRD	SFC to 030 035 to 060 065 to 130

APPENDIX D-12. DELEGATED AIRSPACE – TRACON: RUNWAY 32 COMPOSITE

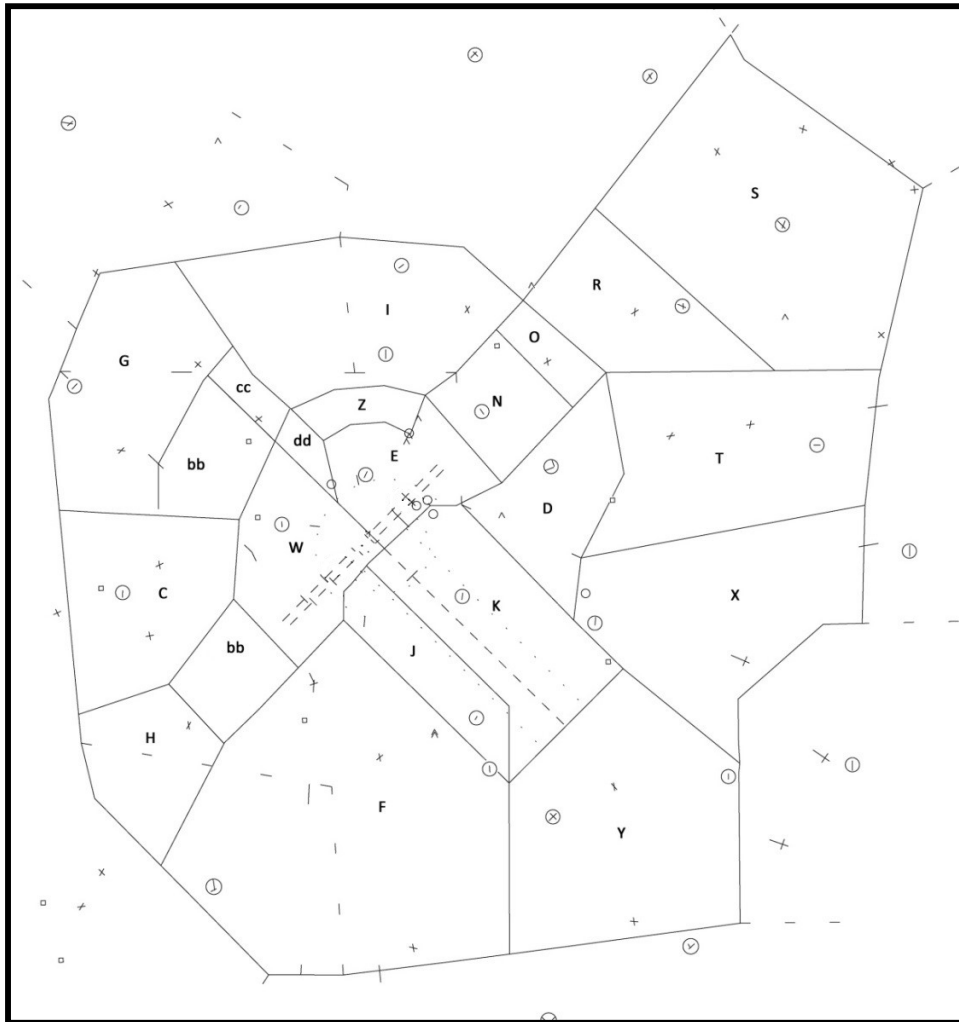


C	DRW	SFC to 130	D	STS DRE	SFC to 050 055 to 130	E	DRE FRD	SFC to 050 055 to 130
F	DRW	SFC to 130	G	DRW FRB	SFC to 090 095 to 130	H	DRW FRB	SFC to 090 095 to 130
Excludes HUF - BMG Airspace SFC to 050						Excludes HUF - BMG Airspace SFC to 050		
I	STN DRE	SFC to 050 055 to 130	J	FNI FRB	SFC to 060 065 to 130	K	FNF FRD	SFC to 060 065 to 130
N	STS DRE FRD	SFC to 050 055 to 060 065 to 130	O	STS DRE FRD	SFC to 050 055 to 090 095 to 130	R	STS FRD	SFC to 090 095 to 130
S	STS FRD	SFC to 090 095 to 130	T	STS DRE	SFC to 090 095 to 130	W	DRW FRB	SFC to 050 055 to 130
X	STS FRD	SFC to 090 095 to 130	Y	STS FRD	SFC to 060 065 to 130	Z	STN DRE FRD	SFC to 030 035 to 050 055 to 130
aa	DRW FNI FRB	SFC to 030 035 to 060 065 to 130	bb	DRW FRB	SFC to 060 065 to 130	cc	DRE FRB	SFC to 060 065 to 130
dd	DRE FRB	SFC to 050 055 to 130				ff	DRE FNF FRD	SFC to 030 035 to 060 065 to 130

APPENDIX D-13. DELEGATED AIRSPACE – TRACON: RUNWAY 14 COMPOSITE

C	DRW	SFC to 130	D	STS DRE	SFC to 050 055 to 130	E	DRE FRD	SFC to 050 055 to 130
F	DRW	SFC to 130	H	DRW FRB	SFC to 090 095 to 130	I	STN DRE	SFC to 050 055 to 130
Excludes HUF - BMG Airspace SFC to 050			Excludes HUF - BMG Airspace SFC to 050					
J	FNI FRB	SFC to 060 065 to 130	K	FNF FRD	SFC to 060 065 to 130	N	STS DRE FRD	SFC to 050 055 to 060 065 to 130
O	STS DRE FRD	SFC to 050 055 to 090 095 to 130	R	STS FRD	SFC to 090 095 to 130	S	STS FRD	SFC to 090 095 to 130
T	STS DRE	SFC to 090 095 to 130	W	DRW FRB	SFC to 050 055 to 130	X	STS FRD	SFC to 090 095 to 130
Z	STN DRE	SFC to 030 035 to 130						
aa	DRW FNI FRB	SFC to 030 035 to 060 065 to 130	bb	DRW FRB	SFC to 060 065 to 130	cc	DRW FRD	SFC to 060 065 to 130
dd	DRW FRD	SFC to 050 055 to 130	ee	DRE FRD	SFC to 060 065 to 130	ff	DRE FNF FRD	SFC to 030 035 to 060 065 to 130

**APPENDIX D-14. DELEGATED AIRSPACE –
TRACON: TOWER EXPANDED AIRSPACE - RUNWAY 32 COMPOSITE**



C	DRE	SFC to 130	D	STS DRE	SFC to 050 055 to 130	E	DRE FRD	SFC to 050 055 to 130
F	DRE	SFC to 130	G	DRE FRB	SFC to 090 095 to 130	H	DRE FRB	SFC to 090 095 to 130
Excludes HUF - BMG Airspace SFC to 050						Excludes HUF - BMG Airspace SFC to 050		
I	STN DRE	SFC to 050 055 to 130	J	FNI FRB	SFC to 060 065 to 130	K	FNF FRD	SFC to 060 065 to 130
N	STS DRE FRD	SFC to 050 055 to 060 065 to 130	O	STS DRE FRD	SFC to 050 055 to 090 095 to 130	R	STS FRD	SFC to 090 095 to 130
S	STS FRD	SFC to 090 095 to 130	T	STS DRE	SFC to 090 095 to 130	W	DRE FRB	SFC to 050 055 to 130
X	STS FRD	SFC to 090 095 to 130	Y	STS FRD	SFC to 060 065 to 130	Z	STN DRE FRD	SFC to 030 035 to 050 055 to 130
			bb	DRE FRB	SFC to 060 065 to 130	cc	DRE FRB	SFC to 060 065 to 130
dd	DRE FRB	SFC to 050 055 to 130						

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(PAGES 344 - 354)**

APPENDIX E**APPENDIX E. AUTHORIZED IND DEPARTURE ALTITUDES**

AIRCRAFT TYPE	DESIGNATED DEPARTURE RUNWAY	NON-DESIGNATED DEPARTURE RUNWAY
PROPS	3,000' MSL or lower requested altitude	3,000' MSL or lower requested altitude
JETS	5,000' MSL or lower requested altitude	3,000' MSL or lower requested altitude

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(PAGES 356 – 366)**

APPENDIX F

APPENDIX F. AUTHORIZED IND DEPARTURE HEADINGS

TIME (LCL)	AIRCRAFT TYPE	DESIGNATED DEPARTURE RUNWAY		NON-DESIGNATED DEPARTURE RUNWAY	
		RUNWAY	HEADING	RUNWAY	HEADING
0700-1900	Props	All	A heading that will enter Area A.	All	A heading that will enter Area A.
	Jets	All	RH	All	RH until 2,500 MSL then a heading that will enter Area A.
	Jets during Peak Traffic	23L	RH, 210° or 245°		
		23R	RH, 215° or 245°**		
		5R	RH or 070°		
		5L	RH or 070°**		
		14 or 32	RH		
1900-2200	Props	All	A heading that will enter Area A.	All	A heading that will enter Area A.
	Jets	23L	RH, 210° or 245°	23L	RH until 2,500 MSL then a heading that will enter Area A.
		23R	RH or 215°	23R	
		5R	RH or 070°	5R	
		5L	RH	5L	
		14 or 32	RH	14* or 32*	
2200-0600	Props	All	A heading that will enter Area A.	All	A heading that will enter Area A.
	Jets	23L	RH, 210° or 245°	23L	RH until 2,500 MSL then a heading that will enter Area A.
		23R	RH or 215°	23R	
		5R	070°	5R	
		5L	RH	5L	
		14 or 32	RH	14* or 32*	
0600-0700	Props	All	A heading that will enter Area A.	All	A heading that will enter Area A.
	Jets	23L	RH, 210° or 245°	23L	RH until 2,500 MSL then a heading that will enter Area A.
		23R	RH or 215°	23R	
		5R	RH or 070°	5R	
		5L	RH	5L	
		14 or 32	RH	14* or 32*	
During TEA Operations	Props	All	A heading that will enter Area A.	All	A heading that will enter Area A.
	Jets	23R	RH, 215° or 245°**	All	RH until 2,500 MSL then a heading that will enter Area A.
		23L	RH, 210° or 245°.		

* Assignment of runway 14 or runway 32 as a non-designated departure runway is subject to runway use restrictions contained in Appendix A-1.

** Aircraft assigned a 245° heading off of Runway 23R or a 070° heading off of Runway 05L must be restricted so the aircraft does not start the turn to the assigned heading until 2,500 MSL or above.

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(PAGES 368 - 378)**

APPENDIX G

APPENDIX G. STARS LOCAL ADAPTIONS

TCW/TDW Configuration Macros

Full TCW Configuration (Opens all scopes)	
Runway Configuration	STARS Keyboard Entry
Runway 5L/R	MULTI FUNC,C,R05,ENTER
Runway 23R/L	MULTI FUNC,C,R23,ENTER
Runway 32	MULTI FUNC,C,R32,ENTER
Runway 14	MULTI FUNC,C,R14,ENTER

TRACAB Macros	
Tower TDW that radar positions are combined	STARS Keyboard Entry
T	MULTI FUNC,C,TWT,ENTER
X	MULTI FUNC,C,TWX,ENTER
Y	MULTI FUNC,C,TWY,ENTER

TRACON Configuration Macros			
Configuration #	Open TCW(s)	Positions Combined to Open TCW	STARS Keyboard Entry
1	E	W,S,N,D,B,F,I	F16,C,1,ENTER
2	E	D,F,S (N on 14/32 Config.)	F16,C,2,ENTER
	W	B,I (N on 5/23 Config.)	
3	B	D,F,I	F16,C,3,ENTER
	E	S (N on 14/32 Config.)	
	W	(N on 5/23 Config.)	
4	B	D	F16,C,4,ENTER
	F	I	
	E	S (N on 14/32 Config.)	
	W	(N on 5/23 Config.)	
5	E	W,B,D,S,N	F16,C,5,ENTER
	F	I	
6	B	D,F,I	F16,C,6,ENTER
	E	W,S,N	
7	B	D,F,I	F16,C,7,ENTER
	E	W	
	S	N	
8		NOT USED	
9	B	D,F,I	F16,C,9,ENTER
	E	W	
	N	S	

TRACON Configuration Macros (cont.)			
Configuration #	Open TCW(s)	Positions Combined to Open TCW	STARS Keyboard Entry
10	B	D,F,I	F16,C,10,ENTER
	E		
	W		
	S	N	
11	B	D	F16,C,11,ENTER
	F	I	
	E	W	
	S	N	
12	E	D,S (N on 14/32 Config.)	F16,C,12,ENTER
	W	B (N on 5/23 Config.)	
	F	I	

STARS Local Flight Plan Information

“N” not required for Local VFR Flight Plan. e.g. “41VU” generates N41VU with a 03__ beacon code.

LIFT Academy Local VFR Flight Plan – “L” followed by three numeric digits will generate a local VFR flight plan with the call sign LTA__ __, aircraft type: DA40 and a 03__ beacon code.

LIFT Academy Local IFR Flight Plan – “L” followed by four numeric digits that ends in a “0” will generate a local IFR flight plan with the call sign LTA__ __ 0, aircraft type: DA42 and a 02__ beacon code.

LIFT Academy Local VFR Flight Plan for spin training aircraft – “L” followed by “462L” or “465L” will generate a local VFR flight plan with the call sign LTA462L or LTA465L, aircraft type: DA20 and a 03__ beacon code.

Purdue University Local VFR Flight Plan – “P” followed by two numeric digits will generate a local VFR flight plan with the call sign PDU__ __, aircraft type: P28A and a 03__ beacon code.

STARS Automatically Generated Scratchpad Entries

IND IFR Departures will show a departure gate code (see table below) and two digit requested altitude in scratchpad 1. (e.g. D32 would correspond to an aircraft on the DAWNN Departure requesting FL320 as a final altitude.)

Aircraft Filed on a SID	Scratch Pad 1
MEARZ (BVT)	B
MEARZ (OKK)	K
MEARZ (MZZ)	N
MAREO	E
DAWNN	D
HOOSR	P
ROCKY	W

Non-SID Aircraft	Scratch Pad One
GUS (NE)	K
GUS (NW)	B
FWA	E
CMH	E
CVG	H
ZID (southbound)	S
HUF (SW)	P
HUF (W)	W

IND VFR Departures will show the direction of flight in scratch pad one if they will hand-off to another approach or center.

Inter-facility Hand-off	Scratch Pad One
CMH	E
CVG	SE
ABB	S
HUF	SW
HUF	W
GUS	NW
GUS	N
FWA	NE

Non-RNAV Arrivals Scratch Pad Data:

Conventional arrivals that are not on a RNAV STAR will have a yellow “NR” in scratch pad one.

Dayton International (DAY), Wright-Patterson (FFO) and Dayton-Wright Brothers (MGY) Scratch Pad:

ZID LOA allows for flash-through procedures for airplanes routed via RID landing DAY FFO and MGY. Overflights routed over the southern CMH boundary @ or above 11,000 will display “RID” in scratch pad one.

CVG scratch pad:

Overflights routed into CVG’s airspace via the CEGRM or Shelbyville STARs will display “CVG” in scratch pad one.

Satellite Arrivals scratch pad:

Satellite Arrivals will show landing airport in scratch pad one.

To enable the Pointout Counter:

MULTI FUNC,P,O,E,ENTER

Automatic Altimeter Setting Update Entry:

This function allows STARS to accept automatic updates from the DASI. The SSA will display the current setting followed by an "A".

To enable Automatic Altimeter Setting Update: MULTI FUNC,A,INDdddd,_,A,ENTER where "dddd" is the current altimeter setting.

To disable Automatic Altimeter Setting Update: MULTI FUNC,Sdddd,ENTER where "dddd" is the current altimeter setting.

Auto-Leader Direction (Dump Zones):

All Dump Zones are enabled at system startup

Auto-Leader Direction (Dump Zones)	
Leader Direction(s)	STARS Keyboard Entry
Enable Auto-Leader direction for RY 05L – NW / RY 05R - SE	MULTI FUNC,O,R05,ENTER
Enable Auto-Leader direction for RY 14 - W	MULTI FUNC,O,R14,ENTER
Enable Auto-Leader direction for RY 23L – SE / RY 23R - NW	MULTI FUNC,O,R23,ENTER
Enable Auto-Leader direction for RY 32 (E)	MULTI FUNC,O,R32,ENTER
Disable Auto-Leader direction for RY 05L / RY 05R	MULTI FUNC,O,Z,R05,ENTER
Disable Auto-Leader direction for RY 14	MULTI FUNC,O,Z,R14,ENTER
Disable Auto-Leader direction for RY 23L / RY 23R	MULTI FUNC,O,Z,R23,ENTER
Disable Auto-Leader direction for RY 32	MULTI FUNC,O,Z,R32,ENTER
Disable Auto-Leader direction for all RYs	MULTI FUNC,O,Z,ENTER

Combination Runway Assignment and Leader Direction:

On Runway 23 Configuration		
STARS Entry	Leader Direction	Scratch Pad Two Display
11,slew,TRACKBALL ENTER	NW	+R
99,slew,TRACKBALL ENTER	SE	+L
On Runway 14 Configuration		
STARS Entry	Leader Direction	Scratch Pad Two Display
44,slew,TRACKBALL ENTER	W	+R14
On Runway 32 Configuration		
STARS Entry	Leader Direction	Scratch Pad Two Display
66,slew,TRACKBALL ENTER	E	+R32
On Runway 5 Configuration		
STARS Entry	Leader Direction	Scratch Pad Two Display
11,slew,TRACKBALL ENTER	NW	+L
99,slew,TRACKBALL ENTER	SE	+R

Automatic Inter-Facility Hand-Off Parameters:

When Inter-facility automatic hand off processing is enabled, the following parameters apply:

Automatic hand-off for overflight aircraft is initiated when the aircraft reaches 15 miles from the IND airspace boundary.

Automatic hand-off for departure aircraft climbing to Center altitudes is initiated as they pass 6200 ft.

Automatic hand-off for departure aircraft staying below Center altitudes flash to the appropriate adjacent TRACON when reaching 15 NMs from the boarder.

Automatic hand-off for departure aircraft that are already within 15 NMs of the boarder when they acquire, flash climbing out of 2000 ft.

Permanent Restriction Areas:

Restriction Area	STARS Entry
Lucas Oil (3800 MSL)	F12,101
IMS (3800)	F12,103
MQJ FNF Airspace Block	F12,105
AARIN Intersection	F12, 109
R3401 HOT 250/140	F12,130

Converging Runway Display Aid (CRDA) Macros

After CDRA is enabled system wide and at the desired workstation, the following macros will activate a specific runway pair for ghosting in Stagger Mode.

STARS Entry	Runway Pair(s) Activated
F16,G05	Activates both Runway Pair 1 and 4 in Stagger Mode.
F16,G14/05	Activates only Runway Pair 1 in Stagger Mode.
F16,G32/05	Activates only Runway Pair 4 in Stagger Mode.
F16,G23	Activates both Runway Pair 6 & 7 in Stagger Mode.
F16,G14/23	Activates only Runway Pair 7 in Stagger Mode.
F16,G32/23	Activates only Runway Pair 6 in Stagger Mode
F16,GOFF	Disable all Runway Pairs
F16,N,1	Removes all CRDA Pairs and Activates Runway Pair 1 in Stagger Mode
F16,N,2	Removes all CRDA Pairs and Activates Runway Pair 2 in Stagger Mode
F16,N,3	Removes all CRDA Pairs and Activates Runway Pair 3 in Stagger Mode
F16,N,4	Removes all CRDA Pairs and Activates Runway Pair 4 in Stagger Mode
F16,N,5	Removes all CRDA Pairs and Activates Runway Pair 5 in Stagger Mode
F16,N,6	Removes all CRDA Pairs and Activates Runway Pair 6 in Stagger Mode
F16,N,7	Removes all CRDA Pairs and Activates Runway Pair 7 in Stagger Mode
F16,N,8	Removes all CRDA Pairs and Activates Runway Pair 8 in Stagger Mode

CRDA Runway IDs:

23L – displays ghost targets on RY 23L
 23R – displays ghost targets on RY 23R
 05L – displays ghost targets on RY 5L
 05R – displays ghost targets on RY 5R
 14 – displays ghost targets on RY 14
 32 – displays ghost targets on RY 32

CRDA Runway Pair Numbers

1 – IND 05L/14
 2 – IND 05L/32
 3 – IND 05R/14
 4 – IND 05R/32
 5 – IND 23L/14
 6 – IND 23L/32
 7 – IND 23R/14
 8 – IND 23R/32

To enable ATPA for VFR IND Arrivals (Aircraft must be in arrival status for IND):

*,V,E,slew TRACKBALL ENTER

ATPA Runway Approach Volume Qualification Scratchpad Entries

All Runways	
Scratchpad One Entry	RY APCH Volume Qualification Result
VB	Ineligible
VS	Ineligible
RY05L ATPA RY APCH Volume	
Scratchpad Two Entry	RY APCH Volume Qualification Result
23L	Excluded from RY05L APCH Volume
23R	Excluded from RY05L APCH Volume
R	Excluded from RY05L APCH Volume
R14	Excluded from RY05L APCH Volume
R32	Excluded from RY05L APCH Volume
R5R	Excluded from RY05L APCH Volume
UW	Excluded from RY05L APCH Volume
RY05R ATPA RY APCH Volume	
Scratchpad Two Entry	RY APCH Volume Qualification Result
23L	Excluded from RY05R APCH Volume
23R	Excluded from RY05R APCH Volume
L	Excluded from RY05R APCH Volume
R14	Excluded from RY05R APCH Volume
R32	Excluded from RY05R APCH Volume
R5L	Excluded from RY05R APCH Volume
UW	Excluded from RY05R APCH Volume
RY23L ATPA RY APCH Volume	
Scratchpad Two Entry	RY APCH Volume Qualification Result
05L	Excluded from RY23L APCH Volume
23R	Excluded from RY23L APCH Volume
R	Excluded from RY23L APCH Volume
R14	Excluded from RY23L APCH Volume
R32	Excluded from RY23L APCH Volume
R5L	Excluded from RY23L APCH Volume
R5R	Excluded from RY23L APCH Volume
UW	Excluded from RY23L APCH Volume

ATPA Runway Approach Volume Qualification Scratchpad Entries Continued	
RY23R ATPA RY APCH Volume	
Scratchpad Two Entry	RY APCH Volume Qualification Result
05L	Excluded from RY23R APCH Volume
23L	Excluded from RY23R APCH Volume
L	Excluded from RY23R APCH Volume
R14	Excluded from RY23R APCH Volume
R32	Excluded from RY23R APCH Volume
R5L	Excluded from RY23R APCH Volume
R5R	Excluded from RY23R APCH Volume
UW	Excluded from RY23R APCH Volume
RY14 ATPA RY APCH Volume	
Scratchpad Two Entry	RY APCH Volume Qualification Result
23L	Excluded from RY14 APCH Volume
23R	Excluded from RY14 APCH Volume
L	Excluded from RY14 APCH Volume
R	Excluded from RY14 APCH Volume
R32	Excluded from RY14 APCH Volume
R5L	Excluded from RY14 APCH Volume
R5R	Excluded from RY14 APCH Volume
UW	Excluded from RY14 APCH Volume
RY32 ATPA RY APCH Volume	
Scratchpad Two Entry	RY APCH Volume Qualification Result
05L	Excluded from RY32 APCH Volume
23L	Excluded from RY32 APCH Volume
23R	Excluded from RY32 APCH Volume
L	Excluded from RY32 APCH Volume
R	Excluded from RY32 APCH Volume
R14	Excluded from RY32 APCH Volume
R5L	Excluded from RY32 APCH Volume
R5R	Excluded from RY32 APCH Volume
UW	Excluded from RY32 APCH Volume

STARS Flight Rules Change from IFR to VFR:

The STARS input <H><V><SLEW> will change the flight rules for a target from IFR rules to VFR rules.

Pre-Assigned Beacon Codes and Call Signs

Beacon Code	Call Sign	Aircraft Type	Associated Position
0357	JUMP1	C182	1E
0360	JUMP2	C182	1E
0361	JUMP3	C182	1E
0362	LN490AE	HELO	1T
0363	LN402PH	HELO	1T
0364	LN271AE	HELO	1T
0365	LN166AE	HELO	1T
0366	H68	HELO	1T
0367	N4SP	HELO	1T
0370	H70	HELO	1T
0371	H71	HELO	1T
0372	H72	HELO	1T
0373	N407SS	HELO	1T
0376	N507SP	HELO	1T
1255	H55	HELO	1T
1256	H56	HELO	1T
1257	H57	HELO	1T
1260	H60	HELO	1T
1261	H61	HELO	1T
1262	H62	HELO	1T
1263	H63	HELO	1T
1264	H64	HELO	1T
1265	H65	HELO	1T
1266	H66	HELO	1T
1267	H67	HELO	1T

Satellite Airport RNAV Approach Radar Video Map MACROS

Typing "F16,XXX" where "XXX" is the 3 digit alphanumeric for a satellite airport with an RNAV approach, will toggle on/off the RNAV approach radar video map (RVM) for that airport.

STARS Entry	RVM Number Displayed	STARS Map MNEMONIC
F16,AID	603	AIDRNAV
F16,BMG	208	BMGRNAV
F16,EYE	609	EYERNV
F16,GPC	637	GPCRNAV
F16,HFY	614	HFYRNV
F16,MQJ	621	MQJRNAV
F16,UMP	630	UMPRNAV
F16,5I4	639	5I4RNAV
F16,BAK	605	BAKRNAV
F16,CFJ	607	CFJRNV
F16,GEZ	613	GEZRNAV
F16,I34	644	I34RNAV

Satellite Airport RNAV Approach Radar Video Map MACROS Continued		
STARS Entry	RVM Number Displayed	STARS Map MNEMONIC
F16,MIE	616	MIERNV
F16,TYQ	627	TYQRNAV
F16,UWL	634	UWLRNAV
F16,2R2	657	2R2RNAV

AT Coach Pilot STARS Shortcuts

STARS Entry	Result
F16,V,(N,S,E, or W),SLEW	Create 1200 code heading N,S,E, or W
F16,V,H###,SLEW	Create 1200 code w/specified heading (e.g. H045)
F16,V,ACID,H###,SLEW	Create 1200 code w/specified heading (e.g. H045) and a Local VFR flight plan (must change beacon manually to assigned code after creation).
F16,P	Toggle Auto Quicklook at the Tower (10 NM circle around IND, on at system start up).
F16,R,R,SLEW	Move Range Rings to slewed location
F16,R,R,Enter	Move Range Rings back to center

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APPENDIX H

APPENDIX H. TERMS, ABBREVIATIONS, ACRONYMS AND IDENTIFIERS

TERM, ABBREVIATION, ACRONYM or IDENTIFIER	MEANING
AAR ¹	Airport Arrival Rate
AC	Advisory Circular
ACID	Aircraft Identification
AD	Arrival Data
ADB	Automatic Dependent Broadcast
ADIZ	Air Defense Identification Zone
ADR	Airport Departure Rate
ADS-B	Automatic Dependent Surveillance-Broadcast
AIA	Automatic Instrument Approach
AHOP	Automatic Handoff Program
AID	Anderson, IN
AIRMET	Airman's Meteorological Information
AIS-R	Aeronautical Information System Replacement
ALSF	Approach Light System with Sequenced Flashing Lights
AOA	At or above
AOB	At or below
AOI	Airport Operational Information
APCH	Approach
APREQ	Approval Request
APPROX	Approximately
ARP	Airport Reference Point
ARTCC	Air Route Traffic Control Center
ATCSCC	Air Traffic Control System Command Center
ATCT	Airport Traffic Control Tower
ATCS	Air Traffic Control Specialist
ATIS	Automatic Terminal Information System
ATM	Air Traffic Manager
ATPA	Automated Terminal Proximity Alert
ASR	Airport Surveillance Radar
ASOS	Automated Surface Observing System
AWOS	Automated Weather Observing System
BAK	Columbus, IN
BMG	Bloomington, IN
CA	Conflict Alert
CAK	Akron-Canton, OH
CAT	Category
CD	Clearance Delivery
CEDAR	Comprehensive Electronic Data Analysis and Reporting
CFR	Call For Release
CIC	Controller-in-Charge (may be in Tower or TRACON)
CLE	Cleveland, OH

CMH	Columbus, OH
CRDA	Converging Runway Display Aid
CS	OS/CIC- Tower
CTL	TFDM NLA – Cleared to Land
CVG	Cincinnati, OH
CTSU	Central Terminal Service Unit
CWA	Center Weather Advisory
CWU	Center Weather Unit
DARC	Direct Access Radar Channel
DASI	Digital Altimeter Setting Indicator
D-ATIS	Digital ATIS
DAY	Dayton, OH
DEN	Domestic Events Network
DCB	Display Control Bar
DCP	Display Control Panel
DM	Departure Message
DME	Distance Measuring Equipment
DNV	Danville
DP	Departure Procedure
DR	Departure Radar (may be followed by position, IE DRE)
DSA	Direct Sensor Access
DTA	Departure Transition Area
DTN	Downtown Heliport(s)
DVRS	Digital Voice Recording System
ECS	Emergency Communication System (PET 2000)
EDCT	Expected Departure Clearance Time
EFS	Electronic Flight Strip
EFSTS	Electronic Flight Strip Transfer System
EOC	Emergency Operations Center
EOR	Electronic Occurrence Report
ERAM	En-Route Automation Modernization
ESP	En-Route Spacing Program
ETC	Et cetera
FAAO	Federal Aviation Administration Order
FAF	Final Approach Fix
FD	Flight Data
FBO	Fixed Base Operator
FDB	Full Data Block
FDC	Flight Data Center
FDIO	Flight Data Input/Output

FDX	Federal Express
FFM	Far Field Monitor
FLOP	Functional Lapse of Operational Program
FN	Final Radar (may be followed by position , IE FNI)
FP	Flight Plan
FPS	Flight Progress Strip
FRC	Full Route Clearance
FR	Feeder Radar (may be followed by position , IE FRB)
FSDO	Flight Standards District Office
FSL	Full Service Level
FSS	Flight Service Station
FWA	Fort Wayne, IN
FWD	Call Forward Button
FT	Feet
GA	Ground Control Assistant
GC	Ground Control
GCC	Ground Control Centered
GENOT	General Notice
GPS	Global Positioning System
GRE	Ground Run-up Enclosure
GS	Glideslope
GUS	Grissom RAPCON
HAW	Hawker Beechcraft
HFR	Hold For Release
HIWAS	Hazardous In-flight Weather Advisory Service
HO	Hand-off
HOST	ARTCC NAS Computer
HUF	Terre Haute, IN
IAA	Indianapolis Airport Authority
IAB	International Arrivals Building
IAW	In Accordance With
ICMS	Integrated Control Monitor System
ICU	Interlock Control Unit
ID	Identification
IDAC	Integrated Departure Arrival Capability
IDS	Information Display System
IFR	Instrument Flight Rules
IE	id est (Latin), "that is"
IJC	Indianapolis Jet Center
ILS	Instrument Landing System
INA	Indianapolis ASR-9
IND⁻¹	Indianapolis Air Traffic Control Tower
IND⁻²	ZID Long Range Radar
IND⁻³	Indianapolis International Airport

INZA	FDIO-IND Tracon
INZT	FDIO-IND Tower
IMC⁻¹	Indianapolis Maintenance Center
IMC⁻²	Instrument Meteorological Conditions
ISR	Increased Separation Requirement
ITWS	Integrated Terminal Weather System
LC	Local Control (may be followed by position, IE LCE)
LCC	Local Control Centered
LCL	Local Time
LDR	Labor Distribution Reporting
LIMC⁻²	Low Instrument Meteorological Conditions
LLWAS	Low Level Wind Shear Alert System
LOA	Letter of Agreement
LOC	Localizer
LRR	Long Range Radar
LUAW	Line Up and Wait
LVMC	Low VFR Meteorological Conditions
MALSR	Medium Intensity Approach Light System with Runway Alignment Indicator Lights
MCI	Mode-C Intruder
MFD	Mansfield, OH
MIE	Muncie, IN
MINIT	Minutes in Trail
MIT	Miles In Trail
MOR	Mandatory Occurrence Report
MSAW	Minimum Safe Altitude Warning
MSL	Mean Sea Level
MVA	Minimum Vectoring Altitude
NAS	National Airspace System
NLA	TFDM - Next Logical Action
NM	Nautical Miles
OCIC	Overall Controller-in-Charge (normally in TRACON)
OCS	Obstacle Clearance Surfaces
ODO	Opposite Direction Operations
ODP	Obstacle Departure Procedure
OJT	On-the-Job Training
OJTI	On-the-Job Training Instructor
OPSNET	Operations Network
OPM	Office of Personnel Management
OS	Operations Supervisor
OSIC	Overall Supervisor-in-Charge (normally in TRACON)
OTP	VFR On Top
OTS	Out of Service
P-ACP	Pre-Arranged Coordination Procedure

PAJ	Parachute Jumping Activity
PAPI	Precision Approach Path Indicator
PBX	Private Branch Exchange
PDC	Pre-departure Clearance
PIREP	Pilot Report
PIX	Photography
PO	Point-out
POFZ	Precision Obstacle Free Zone
QAR	Quality Assurance Review
QWO	London, OH Long Range Radar
RB	Record Button
RC	Radar Coordinator
RDVS	Rapid Deployment Voice Switch
RECAT	Wake Turbulence Recategorization
RENOT	Regional Notice
RGL	Runway Guard Lights
RH	Runway Heading
R&I	Read and Initial
RICU	Remote Indication and Control Unit
RLS	Released
RON	Remain Overnight (Parking)
RPA	Republic Airlines
RSU	Remote Status Unit
RTR	Remote Transmitter and Receiver
RVR	Runway Visual Range
RY	Runway
SAR	Surface Area of Responsibility
SIA	Status Information Area
SID	Standard Instrument Departure
SFC	Surface
SIGMET	Significant Meteorological Information
SMGCS	Surface Movement Guidance and Control System
SMP	Surface Metering Program
SOP	Standard Operating Procedures
SSA	Systems Status Area
ST	Satellite Radar (may be followed by position, IE STN)
STAR	Standard Terminal Arrival Route
STARS	Standard Terminal Automation Replacement System
SUA	Special Use Airspace
STV	St. Vincent Hospital

STF	Stout Field
SVFR	Special VFR
TEA	Tower Expanded Airspace Procedure
TAF	Terminal Area Forecast
TBFM	Time Based Flow Management
TCID	Indianapolis District
TCP	Terminal Controller Position
TCW	Terminal Controller Workstation
TDLS	Terminal Data Link Services
TDW	Tower Display Workstation
TDX	Tradewinds Airlines
TEAM	Training Enterprise Application and Management
TELCON	Telephone Conference
TFDM	Terminal Flight Data Manager
TFMS	Traffic Flow Management System
TMAT	Target Movement Area Entry Time
TMS	Traffic Management System
TMU	Traffic Management Unit
TOL	Toledo, OH
TOS	Time Outside of Shift
TRACON	Terminal Radar Approach Control
TS	OSIC-OCIC-TRACON
TSA	Transportation Security Administration
TWR	Tower
TWY	Taxiway
UHF	Ultra High Frequency
UTC	Coordinated Universal Time
UUA	Urgent Pilot Weather Report
VA	Visual Approach
VFR	Visual Flight Rules
VHF	Very High Frequency
VMC	VFR Meteorological Conditions
VOR	VHF Omni-directional Range
VS	Visual Separation
VSBP	Voice Switch Bypass
WCLC	Watch Checklists Complete
WS	Windsock
WST	Convective SIGMET
WX	Weather Information
YNG	Youngstown, OH
ZAU	Chicago ARTCC
ZID	Indianapolis ARTCC