

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT ID</u> UMP	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> INDIANAPOLIS	<u>STATE</u> IN		
<u>AIRPORT ELEVATION</u> 811	<u>TDZE</u> 805	<u>SUPERSEDED</u> RNAV (GPS) RWY 15	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 12/28/2023	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
DEEKS		HUBLI		TF	FB	1.00	235.29	5.26	2900
ZIPPY		CRILO		TF	FB	1.00	355.07	3.15	2500
CRILO	IAF	AYUDA	NOPT	TF	FB	1.00	058.44	7.00	2500
HUBLI	IAF	AYUDA	NOPT	TF	FB	1.00	238.52	7.00	2500
AYUDA	IF/IAF	PORCO		TF	FB	1.00	148.44	6.07	2400
PORCO	FAF	FOLIV/3.50 NM TO RW15		TF	FB	0.30	148.57	1.43	
FOLIV/3.50 NM TO RW15		RW15	MAP	TF	FO	0.30	148.57	3.50	
RW15	MAP	1055 MSL		CA			148.57		
1055 MSL		INOYO		DF	FO	1.00			2900

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW15

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2900 DIRECT INOYO AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD NW AYUDA, RT, 148.44 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 148.57 FAF: PORCO DIST FAF TO MAP: 4.93 DIST FAF TO THLD: 4.93
4. MIN ALT: AYUDA 2500, PORCO 2400, FOLIV/3.50 NM TO RW15 1940
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.71 GS ANT: MM: IM:
6. MIN GP INCPT: 2400 GP ALT AT PFAF: PORCO 2400
7. GP ANGLE: 3.00 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 42.6
8. MSA FROM: RW15 2900

QUALITY
10
CHECKED

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING IND ALTIMETER SETTING.
CHART NOTE: RWY 15 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DEEKS ON V11 NORTHEAST BOUND.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE IND ALTIMETER SETTING AND INCREASE LPV DA TO 1098 FEET. INCREASE LNAV/VNAV DA TO 1173 FEET; INCREASE ALL MDAS 60 FEET AND LNAV VISIBILITY CAT C 1/8 SM.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ZIPPY ON V51-97 SOUTHEAST BOUND.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 328.66 INBOUND.
CHART FAS OBST: 930 TOWER (18-028879) 395703N/0860237W.
CHART VDP AT 1.28 NM TO RW15.
WAAS CHANNEL # 86447
REFERENCE PATH ID: W15A
CHART CIRCLING ICON.
LTP HAE: 206 M

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1055	1	250	1055	1	250	1055	1	250		NA				
LNAV/VNAV DA	1130	1	325	1130	1	325	1130	1	325		NA				
LNAV MDA	1240	1	435	1240	1	435	1240	1 1/4	435		NA				
CIRCLING	1320	1	509	1340	1	529	1340	1 1/2	529		NA				



CHANGES - REASONS

1. TERMINAL ROUTES: CHANGED RWY15 MAP CA: FROM '1211 MSL' TO '1055 MSL' - CA ALTITUDE 1055 IS THE LPV DA, LPV ADDED PER FPT REQUEST.

2. MISSED APPROACH: ADDED MAP: LPV DA, LNAV/VNAV DA - PER FPT REQUEST.

3. PROFILE LINE 2: CHANGED HOLD INBOUND FROM 148.49 TO 148.44 - TO MATCH INTERMEDIATE COURSE IAW 8260.19J 8-6-7.B(2).

4. PROFILE LINE 5: ADDED '250 HAT: 0.71' - PER FPT REQUEST, ADDED LPV MIN.

5. PROFILE LINE 6: ADDED 'MIN GP INCPT: 2400', 'GP ALT AT PFAF: PORCO 2400' - PER FPT REQUEST, ADDED LPV MIN.

6. PROFILE LINE 7: ADDED 'GP ANGLE: 3.00' AND 'TCH: 42.6' – ADDED LPV LINES OF MINIMA PER FPT REQUEST IAW 8260.19J 8-6-7.G(1),(2).

7. NOTES: UPDATED CHART NOTE: FROM 'HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED' TO 'RWY 15 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED' - 8260.19J 8-6-12.K(2).

8. NOTES: CHANGED CHART NOTE: FROM 'VDP NA WHEN USING INDIANAPOLIS INTL ALTIMETER SETTING' TO 'BARO-VNAV AND VDP NA WHEN USING IND ALTIMETER SETTING' - IAW 8260.19J 8-6-10.E(8),(9).

9. NOTES: ADDED CHART NOTE: 'FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C (°F) OR ABOVE 54°C (°F)' - IAW 8260.19J 8-6-10.R

10. NOTES: CHANGED ALTIMETER CHART NOTE: FROM 'WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE INDIANAPOLIS INLT ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET AND LNAV CAT C VISIBILITY 1/4 SM' TO 'WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE IND ALTIMETER SETTING AND INCREASE LPV DA TO 1098 FEET. INCREASE LNAV/VNAV DA TO 1173 FEET; INCREASE ALL MDAS 60 FEET AND LNAV VISIBILITY CAT C 1/8 SM' - IAW 8260.19J 8-6-10.F(4), PER FPT REQUEST ADDED LPV, LNAV/VNAV MINS.

11. NOTES: CHANGED CHART PLANVIEW NOTE: FROM 'PROCEDURE NA FOR ARRIVALS AT DEEKS V11 NORTHEASTBOUND AND ARRIVALS AT ZIPPY V51-97 SOUTHEASTBOUND' TO 'PROCEDURE NA FOR ARRIVALS AT ZIPPY ON V51-97 SOUTHEAST BOUND' AND TO 'PROCEDURE NA FOR ARRIVALS AT ZIPPY ON V51-97 SOUTHEAST BOUND' - SEPARATED NOTES IAW 8260.19J AND MEMO #290 ATTACHMENT 4 PARA 4.

12. ADDITIONAL FLIGHT DATA: CHANGED MISSED HOLD INBOUND FROM 328.67 TO 328.66 - TO MATCH RNAV GPS RWY 33 HILPT INOYO INBOUND IAW 8260.19J 8-6-11.B(1).

13. ADDITIONAL FLIGHT DATA: REMOVED '1008 AAO 395908N/0860524W' - NEW 7:1 OBSTACLE NOW DOCUMENTED IN PART C: GENERAL REMARKS.

14. ADDITIONAL FLIGHT DATA: REMOVED 'PORCO TO RW15: 3.00/43' - PRECISION MINIMUMS DOCUMENTED. VDA NOT REQUIRED.

15. ADDITIONAL FLIGHT DATA: ADDED 'WAAS CHANNEL # 86447', 'REFERENCE PATH ID: W15A', AND 'LTP HAE: 206 M' - NEW FAS DATA FOR LPV IAW 8260.19J 8-6-11.J.

16. MINIMUMS: ADDED LPV DA/HAT/VIS 1055/250/1 CATS A/B/C AND LNAV/VNAV DA/HAT/VIS 1130/325/1 CATS A/B/C - PER FPT/AIRPORT REQUEST: NO VISIBILITY LOWER THAN 1 SM.

17. FAS DATA BLOCK: ADDED FPAP COORDINATES 395508.8985N/0860150.2170W, COURSE WIDTH AT THLD 106.75, LENGTH OFFSET 1576, HAL/VAL 40.0/50.0 AND SIAP-CALCULATED CRC REMAINDER 9B2D0093 - ADDED LPV PER FPT REQUEST.

COORDINATED WITH:

A4A

ALPA

X

AOPA

X

APA

X

HAI

NBAA

X

OTHER: ZID, IND APP CON, AMGR

FLIGHT CHECKED BY

SCOTT WIEBE

Digitally signed by

ROBERT G HAMILTON

Apr 01, 2025

OFFICE

AJF

DATE

03/28/2025

DEVELOPED BY

RAFAEL A MARTINEZ

Digitally signed by

RAFAEL A MARTINEZ

Oct 15, 2024

OFFICE

AJV-A433

DATE

09/09/2024

APPROVED BY

BEV L BORDY

Digitally signed by

ROBERT G HAMILTON

Apr 01, 2025

OFFICE

AJV-A430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KUMP
RUNWAY	RW15
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W15A
LTP/FTP LATITUDE	395622.4885N
LTP/FTP LONGITUDE	0860255.6235W
LTP/FTP ELLIPSOIDAL HEIGHT	+02060
FPAP LATITUDE	395508.8985N
FPAP LONGITUDE	0860150.2170W
THRESHOLD CROSSING HEIGHT (TCH)	00042.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1576
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	9B2D0093

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02399
FPAP ORTHOMETRIC HEIGHT	+02399



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD**

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
UMP	RNAV (GPS) RWY 15	3	INDIANAPOLIS	IN	811	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM DEEKS **TO** HUBLI

RNP 1.00 DISTANCE 5.26 PAT MAP HAT HMAS

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	401021.00N/0860539.00W	1096	215	8	4B	1000				AT804	2900
TERRAIN	401109.00N/0860451.00W	882 (900)								AS1500	2400

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FEEDER

FROM ZIPPY **TO** CRILO

RNP 1.00 DISTANCE 3.15 PAT MAP HAT HMAS

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	395903.00N/0862006.00W	1162	215	8	4B	1000					2200
TERRAIN	395903.00N/0862006.00W	961 (1000)								AS1500	2500

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

QUALITY
10
CHECKED

INITIAL

FROM

CRILO

TO

AYUDA

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	7.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	400654.00N/0861248.00W	1162	215	8	4B	1000					2200
TERRAIN	400142.00N/0861624.00W	980 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM

HUBLI

TO

AYUDA

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	7.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (18-000062)	400513.00N/0860925.00W	1234	250	50	4D	1000					2300
TERRAIN	400654.00N/0861248.00W	980 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE

FROM

AYUDA (IF/IAF)

TO

PORCO

RNP

1.00

DISTANCE

6.07

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (18-000042)	400247.68N/0860953.93W	1235	20	3	1A	500				AT665	2400
TERRAIN	400627.00N/0861024.00W	958 (1000)								AS1000	2000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM

PORCO

TO

RW15

RNP

0.30

DISTANCE

4.93

PAT

MAP

DA

HAT

250

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE (18-033871)	395639.56N/0860315.09W	860	20	3	1A						1055

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV/VNAV

FROM

PORCO

TO

RW15

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	4.93		DA				325				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (18-028879)	395703.00N/0860237.00W	930	50	20	2C	150				AC20	1130

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM

PORCO

TO

FOLIV/3.50 NM TO RW15

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	1.43										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (18-001239)	395933.00N/0860629.00W	1170	500	50	5D	250				RA60 AC50 DG410	1940

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM

FOLIV/3.50 NM TO RW15

TO

RW15

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			<u>HECKE</u>
0.30	3.50		RW15				435				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (18-028879)	395703.00N/0860237.00W	930	250	0	4A	250				DG60	1240

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



HOLD-IN-LIEU OF PT

FROM

AYUDA

TO

P-5

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u> P-5	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (18-000042)	400247.68N/0860953.93W	1235	20	3	1A	1000					2300
TERRAIN	400839.00N/0861645.00W	977 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LPV

FROM

DA

TO

INOYO

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 860			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				2900
TOWER (18-002444)	394939.08N/0855850.95W	1303	500	50	5D	1000					2400
TERRAIN	394903.00N/0855412.00W	908 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH: LNAV/VNAV

FROM

DA

TO

INOYO

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 980			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				2900
TOWER (18-002444)	394939.08N/0855850.95W	1303	500	50	5D	1000					2400
TERRAIN	394903.00N/0855412.00W	908 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM

RW15

TO

INOYO

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 1140			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				2900
TOWER (18-002444)	394939.08N/0855850.95W	1303	500	50	5D	1000					2400
TERRAIN	394903.00N/0855412.00W	908 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



AIRPORT ID

UMP

PROCEDURE NAME

RNAV (GPS) RWY 15

AMDT NO.

3

CITY

INDIANAPOLIS

STATE

IN

AIRPORT ELEVATION

811

FACILITY

RNAV

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☐ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
TOWER (18-027186)	395523.59N/0860140.63W	1.30	509	962	20	3	1A	300		XP58	1320
CATEGORY B											
TOWER (18-001861)	395446.20N/0860332.20W	1.81	529	1000	50	20	2C	300		XP40	1340
CATEGORY C											
TOWER (18-026465)	395740.02N/0860052.89W	2.84	529	1016	20	3	1A	300		XP24	1340

CIRCLING REMARKS:

XP: MAINTAIN CURRENT MINIMUMS.

MSA

CENTER

RW15

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (18-000683)	394603.00N/0860012.00W	171	10.5	1875	500	50	5D	1000			2900

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

IND APP CON, ZID ARTCC, HUF FSS

<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
AWOS-3PT	UMP	24	UMP	0	Y	0
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
ASOS	IND	24	IND	17.43	Y	43

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KUMP 811, KIND 797
RA = 42.2.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW15 - REIL (PCL), MIRL (PCL), PAPI-4L		NPI-G	
RW33 - REIL (PCL), MIRL (PCL), PAPI-4L		NPI-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
3.00	787.1	42.6			3.00	42.6

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	☒	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE	156
ON CENTERLINE	☒	FT FROM CENTERLINE		

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
-16C	+54C	-16C	+13.39C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 827 HIGH TEMP 1176.

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	LPV, LNAV/VNAV, LNAV		
34:1			
860 TREE (18-033871) 395639.560N/0860315.090W (11.67)	849 TREE (18-033866) 395637.670N/0860314.220W (6.44)		

PENETRATIONS REMARKS:



HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
100 FT VEGETATION FROM PREVIOUS PROCEDURE.
ORDER 8260.3 CHAPTER 2 APPLIED TO 1047 AAO 395915.00N/0860609.00W
ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	3.36
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	145.57
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	900
DISTANCE FROM	THLD	TO 1500FT POINT	4.93
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.13
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	145.57
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	900

THRESHOLD COORDINATES (IF STR-IN)	395622.49N/0860255.62W
ARP COORDINATES	395607.43N/0860242.24W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 33 DISTANCE 0.33 NM
FAF COORDINATES	400026.77N/0860633.09W
FIX NAME COORDINATES	

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.
THLD DISPLACED 156FT, ACTUAL COORDINATES: 395623.76N/0860256.76W

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
RAFAEL A MARTINEZ	AJV-A433	09/09/2024	AERONAUTICAL INFORMATION SPECIALIST

