

**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> EYE	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> INDIANAPOLIS	<u>STATE</u> IN
<u>AIRPORT ELEVATION</u> 823	<u>TDZE</u> 823	<u>SUPERSEDED</u> RNAV (GPS) RWY 21	<u>DATED</u> 03/26/2020	<u>EPOCH YEAR</u> 2020
<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>
VHP VORTAC		FAXAG		TF	FO	1.00	040.86	14.64	2900
ANTTI		NATRE		TF	FB	1.00	066.70	25.31	2900
NATRE	IAF	FAXAG	NOPT	TF	FB	1.00	120.50	7.84	2900
WELDO	IAF	FAXAG	NOPT	TF	FB	1.00	226.43	7.38	2900
FAXAG	IF/IAF	MUBDE		TF	FB	1.00	210.60	6.01	2700
MUBDE	FAF	OTGIE/1.60 NM TO RW21		TF	FB	0.30	210.56	4.12	
OTGIE/1.60 NM TO RW21		RW21	MAP	TF	FO	0.30	210.56	1.60	
RW21	MAP	1076 MSL		CA			210.56		
1076 MSL		ANTTI		DF	FO	1.00			2900

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW21

**MISSED APPROACH INSTRUCTIONS:**

CLIMBING RIGHT TURN TO 2900 DIRECT ANTTI AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

- |   |                            |                |                       |                        |         |
|---|----------------------------|----------------|-----------------------|------------------------|---------|
| 1. PT   | SIDE OF COURSE             | OUTBOUND       | FT WITHIN             | MILES OF               | (IAF)   |
| 2. HOLD NE FAXAG, RT, 210.60 INBOUND, 2900 FT. IN LIEU OF PT (IAF), MAX 6000. |                            |                |                       |                        |         |
| 3. FAC: 210.56  | FAF: MUBDE                 |                | DIST FAF TO MAP: 5.72 | DIST FAF TO THLD: 5.72 |         |
| 4. MIN ALT: FAXAG 2900, MUBDE 2700, OTGIE/1.60 NM TO RW21 1380                |                            |                |                       |                        |         |
| 5. DIST TO THLD FROM OM:  | MM:                        | IM:            | 150 HAT:              | 253 HAT: 0.62          | GS ANT: |
| 6. MIN GP INCPT: 2700   | GP ALT AT PFAF: MUBDE 2700 |                |                       | OM:                    | MM:     |
| 7. GP ANGLE: 3.00   | 34:1: IS NOT CLEAR         | 20:1: IS CLEAR | TCH: 55.0             |                        | IM:     |
| 8. MSA FROM: RW21 3100  |                            |                |                       |                        |         |



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 21 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING INDIANAPOLIS INTL ALTIMETER SETTING.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON VHP VORTAC AIRWAY RADIALS 311 CW 081.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ANTTI ON V434 WESTBOUND.  
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 0°C OR ABOVE 54°C.  
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.  
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE INDIANAPOLIS INTL ALTIMETER SETTING AND INCREASE ALL MDAS 20 FEET.

ADDITIONAL FLIGHT DATA:

HOLD W, RT, 069.42 INBOUND.  
CHART FAS OBST: 939 TREE 395141N/0861710W.  
CHART 1192 TOWER (18-000165) 395518N/0861525W.  
CHART VDP AT 1.07 NM TO RW21.  
WAAS CHANNEL # 82509  
REFERENCE PATH ID: W21A  
CHART CIRCLING ICON.  
LTP HAE: 217.3 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	1091	1	268	1091	1	268	1091	1	268		NA				
LNAV/VNAV DA	1076	1	253	1076	1	253	1076	1	253		NA				
LNAV MDA	1200	1	377	1200	1	377	1200	1	377		NA				
CIRCLING	1320	1	497	1320	1	497	1500	2	677		NA				



CHANGES - REASONS

1. INCORPORATED INCORPORATED CHANGES FROM P-NOTAM FOR AMDT 1B AND 1C INTO FORM – IAW 8260-19I PARA 8-3-4C(3).
2. PROFILE LINE 2: ADDED "MAX 6000" TO THE END OF LINE 2. - 8260.19I, 8-6-7,B(2)(A).
3. PROFILE LINE 5: "DIST TO THLD FROM 253 HAT: 0.62" MOVED FROM ADDITIONAL FLIGHT DATA TO PROFILE LINE 5. - 8260.19I 8-6-7E(3).
4. PROFILE LINE 7: ADDED "20:1 IS CLEAR" - IAW 8260.19I 8-6-7G(3).
5. NOTES: CHANGED EQUIPMENT NOTE FROM “CHART NOTE: DME/DME RNP -0.3 NA” TO PBN REQUIREMENTS NOTE “RNP APCH – GPS” – IAW 8260.19I.8-6-8 B(2).
6. NOTES: UPDATED CHART NOTE FROM “CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 0°C (32°F) OR ABOVE 54°C (130°F).” TO “CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 0°C OR ABOVE 54°C.” – IAW 8260.19I 8-6-9R.
7. NOTES: UPDATED HELICOPTER VISIBILITY NOTE FROM "CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED." TO "CHART NOTE: RWY 21 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. - IAW 8260.19I 8-6-11K(3).
8. NOTES: UPDATED VGSI NOT COINCIDENT NOTE FROM "CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI {ANGLE}/TCH {FEET})" TO "CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})." - IAW 8260.19I.8-6-9 M(1).
9. NOTES: DELETED ALS INOP NOTE "CHART NOTE: FOR INOPERATIVE MALS, INCREASE LPV VISIBILITY ALL CATS TO 7/8 MILE." - INCREASE ALL VISIBILITIES TO 1 SM DUE TO RPZ ISSUES.
10. NOTES: CHANGED INOP CHART NOTE FROM: "CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LNAV/VNAV." TO "CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY." - DUE TO NOTAM FDC 3/5088 INCREASE ALL VISIBILITIES TO 1 SM.
11. NOTES: UPDATED PROCEDURE NA NOTE FROM "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WELDO ON V11-305 NORTHEAST BOUND." TO "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ANTTI ON V434 WESTBOUND." - DUE TO OKK VOR MON AND V305 CANCELATION.
12. NOTES: UPDATED PROCEDURE NA NOTE FROM "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON VHP VORTAC AIRWAY RADIALS 017 CW 081." TO "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON VHP VORTAC AIRWAY RADIALS 311 CW 081." - IAW 8260.19I 8-2-5E(2).
13. ADDITIONAL FLIGHT DATA: REMOVED ""LNAV ONLY" AND ASSOCIATED ASTERISK FROM VDP NOTE AND PROFILE LINE 4. - 8260.19I 1-1-5F(12), 8260.19I MEMO ATTACHMENT 3.
14. MINIMUMS: RAISED APPROACH MINIMUMS FOR LPV, LNAV/VNAV, AND LNAV, ALL CATS FROM "3/4 SM" TO "1 SM" - IAW AC 150/5300-13B. 3.13, AND RUNWAY PROTECTION ZONE CONCERNS BY FPT.

COORDINATED WITH:

A4A

ALPA

X

AOPA

X

APA

HAI

NBAA

X

OTHER: ZID, IND APP CON, AMGR

FLIGHT CHECKED BY

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021 GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

OFFICE

Digitally signed by

ERIC N SUSKI

Apr 03, 2024

DATE

DEVELOPED BY

ERIC N SUSKI (JACOB H. CLARK)

Digitally signed by

ERIC N SUSKI

Apr 03, 2024

OFFICE

AJV-A431

DATE

11/27/2023

APPROVED BY

ERIC N SUSKI

Digitally signed by

ERIC N SUSKI

Apr 03, 2024

OFFICE

AJV-A431

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KEYE
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	395009.3085N
LTP/FTP LONGITUDE	0861728.1865W
LTP/FTP ELLIPSOIDAL HEIGHT	+02173
FPAP LATITUDE	394848.8415N
FPAP LONGITUDE	0861818.0210W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	1BDF832B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02507
FPAP ORTHOMETRIC HEIGHT	+02507



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

<u>AIRPORT ID</u> EYE	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 21	<u>AMDT NO.</u> 1C	<u>CITY</u> INDIANAPOLIS	<u>STATE</u> IN	<u>AIRPORT ELEVATION</u> 823	<u>FACILITY</u> RNAV
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## PART A: OBSTRUCTION DATA SEGMENTS

### FEEDER

**FROM** VHP VORTAC **TO** FAXAG

<u>RNP</u> 1.00	<u>DISTANCE</u> 14.64	<u>PAT</u>	<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 (18-000165)	395518.00N/0861525.00W	1192	250	50	4D	1000				AT708	2900
TERRAIN	400000.00N/0860930.00W	929 (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** ANTTI **TO** NATRE

<u>RNP</u> 1.00	<u>DISTANCE</u> 25.31	<u>PAT</u>	<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 (18-000763)	400013.66N/0862814.13W	1269	500	50	5D	1000				AT631	2900
TERRAIN	395648.00N/0863612.00W	985 (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

NATRE

TO

FAXAG

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>					<u>HMAS</u>	
1.00	7.84										
<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	400457.00N/0862100.00W	1168	164	98	4E	1000				AT732	2900
TERRAIN	400457.00N/0862100.00W	968 (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

WELDO

TO

FAXAG

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>					<u>HMAS</u>	
1.00	7.38										
<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				AT665	2900
TERRAIN	400527.00N/0860854.00W	939 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE

FROM

FAXAG (IF/IAF)

TO

MUBDE

RNP

1.00

DISTANCE

6.01

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (18-000167)	395543.00N/0861055.00W	1864	250	50	4D	500				AT336	2700
TERRAIN	400000.00N/0860930.00W	929 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM

MUBDE

TO

RW21

RNP

0.30

DISTANCE

5.72

PAT

MAP

DA

HAT

268

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
RD(N) (KEYEL021)	395016.12N/0861729.66W	836	20	10	1B		34:1			AC10 MA18	1091

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV/VNAV

FROM

MUBDE

TO

RW21

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	5.72		DA				253				
<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>
T-L TWR (18-025067)	394953.58N/0861713.81W	926	20	3	1A	150					1076

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM

MUBDE

TO

OTGIE/1.60 NM TO RW21

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	4.12										
<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	395427.16N/0861538.06W	1090	50	20	2C	250				RA20 DG20	1380

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM

OTGIE/1.60 NM TO RW21

TO

RW21

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30	1.60		RW21				377				
<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>
TREE	395141.32N/0861710.44W	939	50	20	2C	250					1200

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  
FAXAG

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				AT665	2900
TERRAIN	400612.00N/0861142.00W	968 (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  
ANTTI

<u>RNP</u> 0.30	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 893			
<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>
TREE (18-022842)	395029.79N/0861723.79W	904	20	10	1B		ASC				2900
TOWER (18-001084)	394806.00N/0863424.00W	1530	500	50	5D	1000					2600
TERRAIN	394757.00N/0863415.00W	1024 (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: LNAV/VNAV

FROM

DA

TO

ANTTI

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30											926
<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 (18-001084)	394806.00N/0863424.00W	1530	500	50	5D	1000					2600
TERRAIN	394757.00N/0863415.00W	1024 (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: LNAV

FROM

RW21

TO

ANTTI

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30-1.00											1100
<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 (18-001084)	394806.00N/0863424.00W	1530	500	50	5D	1000					2600
TERRAIN	394757.00N/0863415.00W	1024 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



AIRPORT ID

EYE

PROCEDURE NAME

RNAV (GPS) RWY 21

AMDT NO.

1C

CITY

INDIANAPOLIS

STATE

IN

AIRPORT ELEVATION

823

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 (18-055633)	394934.90N/0861619.60W	1.30	497	958	250	50	4D	300		AC50	1320
CATEGORY B											
TOWER (18-055633)	394934.90N/0861619.60W	1.83	497	958	250	50	4D	300		AC50	1320
CATEGORY C											
TOWER (18-002546)	394713.30N/0861756.70W	2.88	677	1147	500	50	5D	300		AC50	1500

CIRCLING REMARKS:

MSA

CENTER

RW21

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (18-000148)	392427.00N/0860852.00W	167	26.5	2002	250	50	4D	1000			3100

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

IND APP CON

<u>WX SERVICE</u> ASOS	<u>LOCATION</u> EYE	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> EYE	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> ASOS	<u>LOCATION</u> IND	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> IND	<u>DISTANCE</u> 6.81	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 20

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME  
KEYE 823, KIND 796  
RA = 19.3.

<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>	
RW03 - REIL, MIRL (PCL), PAPI-2L	NPI-G		
RW21 - MALS (PCL), MIRL (PCL), PAPI-2L	NPI-G		

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 822.5	<u>TCH</u> 55.0	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 34.7
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u> +0C	<u>CRITICAL HIGH</u> +54C	<u>ACT</u> +0C	<u>APT ISA</u> +13.37C
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CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2010-2014).  
CRITICAL LOW TEMPERATURE BASED ON ACT.  
DESCENT RATE (FPM): STANDARD TEMP 827 HIGH TEMP 1121.

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	RWY 21
34:1	
836 RD (N) (KEYEL021) 395016.12N/0861729.66W (2.55)	904 TREE (18-022842) 395029.79N/0861723.79W (28.05)
<u>PENETRATIONS REMARKS:</u>	



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.

AVERAGE VEGETATION HEIGHT 80 FEET PER FPT CHECKLIST.

MINIMUM VIS 1 SM DUE TO RUNWAY PROTECTION ZONE CONCERNS PER FPT.

ORDER 8260.3 CHAPTER 2 APPLIED TO 1192 TOWER (18-000165) 395518.00N/0861525.00W.

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	3.26
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.27
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	205.56
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	900
DISTANCE FROM	THLD	TO 1500FT POINT	4.87
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.00
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	205.56
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	900

THRESHOLD COORDINATES (IF STR-IN)	395009.31N/0861728.19W
ARP COORDINATES	394950.58N/0861739.79W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 3 DISTANCE 0.35 NM
FAF COORDINATES	395519.35N/0861415.84W
FIX NAME COORDINATES	

REMARKS

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
ERIC N SUSKI (JACOB H. CLARK)	AJV-A431	11/27/2023	AERONAUTICAL INFORMATION SPECIALIST

