

**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> KAIO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> 1D	<u>CITY</u> ATLANTIC	<u>STATE</u> IA		
<u>AIRPORT ELEVATION</u> 1165	<u>TDZE</u> 1151	<u>SUPERSEDED</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> 1C	<u>DATED</u> 05/19/2022	<u>MAG VAR</u> 4E	<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>
LINDE	IAF	VAKUC	NOPT	TF	FB	1.00	258.41	31.72	4000
MADUP	IAF	VAKUC	NOPT	TF	FB	1.00	159.28	22.59	4000
VAKUC	IF/IAF	OYOLU		TF	FB	1.00	197.85	6.04	2800
OYOLU	FAF	PUYIG/2.50 NM TO RW20		TF	FB	0.30	197.82	2.56	
PUYIG/2.50 NM TO RW20		RW20	MAP	TF	FO	0.30	197.82	2.50	
RW20	MAP	1447 MSL		CA			197.82		
1447 MSL		YODUG		DF	FO	1.00			4000

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW20

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 4000 DIRECT YODUG AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD N VAKUC, RT, 197.85 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 197.82FAF: OYOLUDIST FAF TO MAP: 5.06DIST FAF TO THLD: 5.06

4. MIN ALT: VAKUC 4000, OYOLU 2800, PUYIG/2.50 NM TO RW20 1980

5. DIST TO THLD FROM OM:MM:IM:150 HAT:296 HAT: 0.81GS ANT:

6. MIN GP INCPT: 2800GP ALT AT PFAF : OYOLU 2800OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 39.0

8. MSA FROM: RW20 3900

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING RWY 12, 30 NA AT NIGHT.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.  
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LINDE ON V172 NORTHEAST BOUND.

ADDITIONAL FLIGHT DATA:

HOLD S, RT, 017.72 INBOUND.  
CHART FAS OBST: 1365 ELEVATOR (19-020226) 412519N/0950145W.  
CHART VDP AT 1.56 NM TO RW20.  
WAAS CHANNEL # 82528  
REFERENCE PATH ID: W20A  
LTP HAE: 322.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, 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	1447	1	296	1447	1	296	1447	1	296		NA				
LNAV/VNAV DA	1733	1 3/4	582	1733	1 3/4	582	1733	1 3/4	582		NA				
LNAV MDA	1680	1	529	1680	1	529	1680	1 1/2	529		NA				
CIRCLING	1760	1	595	1920	1	755	1920	2 1/4	755		NA				



**CHANGES - REASONS**

1. INCORPORATED CHANGES FROM PREVIOUS P-NOTAM INTO FORM.
2. ADDED MAXIMUM HOLDING ALTITUDE AT VAKUC ON LINE 2 - IAW 8260.19 PARA 8-6-7 B (2).
3. ADDED 20:1 CLEAR ON LINE 7 - IAW 8260.19 PARA 8-6-7 G (3).
4. DELETED ASTERISK "\*" AND "\*\*LNAV ONLY" FROM LINE 4 AND ADDITIONAL FLIGHT DATA - IAW 8260.19 PARA 8-6-10 M AND PARA 8-6-7 D.
5. DISTANCE TO THLD FROM 296 HAT MOVED FROM "ADDITIONAL FLIGHT DATA" TO "LINE 5" - IAW 8260.19 PARA 8-6-7 E (3).
6. UPDATED FAS OBSTACLE FROM "1369 ELEVATOR 412519N/0950145W" TO "1365 ELEVATOR (19-020226) 412519N/0950145W" - UPDATED OBSTACLE DATABASE AND IAW 8260.19 PARA 8-6-10 C.
7. DELETED CHART NOTE: DME/DME RNP -0.3 NA AND ADDED PBN REQUIREMENTS NOTE RNP APCH - GPS - IAW 8260.19 PARA 8-6-8 B (2).
8. UPDATED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C OR ABOVE 54C" - IAW 8260.19 PARA 8-6-9 R.
9. DELETED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MADUP ON V138 NORTHEAST BOUND - VOR MON CANCELLING SEGMENTS OF V138.
10. CHANGED MISSED APPROACH INSTRUCTION FROM "CLIMB TO 4000 DIRECT YODUG AND HOLD" TO "CLIMB TO 4000 DIRECT YODUG AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000" - IAW 8260.3 PARA 16-7-3.
11. UPDATED LNAV/VNAV VISIBILITY FROM "2 SM" TO "1 3/4 SM" ALL CATS - IAW 8260.3 SECTION 3-3 TABLE 3-3-1.
12. MOVED ALL BACKUP ALTIMETER NOTES TO 8260-9 FORM - AIRPORT WEATHER INFORMATION AVAILABLE ON WMSCR.

11/07/22: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 09/27/22.

1. ADDED TO FLIGHT CHECKED BY SIGNATURE BLOCK: "PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021 GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION".

12/09/22: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/07/22.

1. UPDATED CHART NOTE "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 17°C OR ABOVE 54°C" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C".
2. UPDATED CHANGES-REASONS #8 TO REFLECT CHANGING TO -17C.

**COORDINATED WITH:**

**A4A** ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** AMGR, ZMP

**FLIGHT CHECKED BY**

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

**OFFICE****DATE**

*Digitally signed by*

**DEVELOPED BY**

FRANK JACKSON JR

*Digitally signed by*

**CASIMIR L TABAKA**

**CASIMIR L TABAKA**

Dec 09, 2022

**OFFICE**

AJV-A431

**DATE**

09/27/2022

**APPROVED BY**

JOHNNIE BAKER

*Digitally signed by*

**CASIMIR L TABAKA**

Dec 09, 2022

**OFFICE**

AJV-A430

**DATE**

**TITLE**  
MANAGER

QUALITY  
16  
CHECKED

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KAIO
RUNWAY	RW20
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
LTP/FTP LATITUDE	412428.4390N
LTP/FTP LONGITUDE	0950250.3550W
LTP/FTP ELLIPSOIDAL HEIGHT	+03226
FPAP LATITUDE	412305.6600N
FPAP LONGITUDE	0950334.3000W
THRESHOLD CROSSING HEIGHT (TCH)	00039.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	FA5D739F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03502
FPAP ORTHOMETRIC HEIGHT	+03502



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

<u>AIRPORT ID</u> KAIO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 20	<u>AMDT NO.</u> 1D	<u>CITY</u> ATLANTIC	<u>STATE</u> IA	<u>AIRPORT ELEVATION</u> 1165	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM  
LINDE

TO  
VAKUC

<u>RNP</u>	<u>DISTANCE</u> 31.72	<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>
WINDMILL (19-022551)	413443.81N/0944133.84W		1955	500	125	5E	1000				AT1045	4000
TERRAIN	413448.00N/0944133.00W		1512 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL

FROM  
MADUP

TO  
VAKUC

<u>RNP</u>	<u>DISTANCE</u> 22.59	<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>
WINDMILL (19-064031)	414556.01N/0950004.48W		1981	250	50	4D	1000				AT1019	4000
TERRAIN	415527.00N/0950051.00W		1541 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:



INTERMEDIATE

FROM  
VAKUC (IF/IAF)

TO  
OYOLU

RNP	DISTANCE 6.04	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (19-001591)	412939.60N/0945746.02W		1706	50	20	2C	500				AT595 SA-1	2800
TERRAIN	413509.00N/0945818.00W		1453 (1500)								AS1000	2500

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

FINAL: LPV

FROM  
OYOLU

TO  
RW20

<u>RNP</u>	<u>DISTANCE</u> 5.06	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 296			<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>
TREE (19-047840)	412455.79N/0950234.44W		1230	50	20	2C		34.00:1			AC20 MA46	1447

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



FINAL: LNAV/VNAV

FROM  
OYOLU

TO  
RW20

<u>RNP</u>	<u>DISTANCE</u> 5.06	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 582			<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>
ELEVATOR (19-020226)	412519.09N/0950145.41W		1365	250	50	4D		23.41:1			AC50	1733

COMPUTATIONS

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

FINAL: LNAV

FROM  
OYOLU

TO  
PUYIG/2.50 NM TO RW20

<u>RNP</u>	<u>DISTANCE</u> 2.56	<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>
AAO	412810.35N/0945957.64W		1559	50	20	2C	250				RA49 DG122	1980

COMPUTATIONS

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



FINAL: LNAV STEPDOWN

FROM  
PUYIG/2.50 NM TO RW20

TO  
RW20

<u>RNP</u>	<u>DISTANCE</u> 2.50	<u>PAT</u>	<u>MAP</u> RW20	<u>HAT</u> 529			<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>
ELEVATOR (19-020226)	412519.09N/0950145.41W		1365	250	50	4D	250				AC50	1680

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

HOLD-IN-LIEU OF PT

FROM  
VAKUC

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>
WINDMILL (19-054346)	414325.46N/0945142.78W	1931	250	50	4D	1000				AT1069	4000
TERRAIN	414051.00N/0950118.00W	1515 (1500)								AS1500	3000

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





MISSED APPROACH : LPV

FROM  
DA

TO  
YODUG

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1239					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE (19-047840)	412455.79N/0950234.44W		1230	50	20	2C		ASC			AC20	4000
TOWER (19-000120)	411900.00N/0950603.00W		1539	250	50	4D	1000					2600
TERRAIN	412245.00N/0950521.00W		1322 (1300)								AS1500	2800

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

MISSED APPROACH : LNAV/VNAV

FROM  
DA

TO  
YODUG

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1583					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				4000
TOWER (19-000120)	411900.00N/0950603.00W		1539	250	50	4D	1000					2600
TERRAIN	412245.00N/0950521.00W		1322 (1300)								AS1500	2800

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



MISSED APPROACH : LNAV

FROM  
RW20

TO  
YODUG

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1580					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				4000
TOWER (19-000120)	411900.00N/0950603.00W		1539	250	50	4D	1000					2600
TERRAIN	412245.00N/0950521.00W		1322 (1300)								AS1500	2800

COMPUTATIONS

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

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 (19-000119)	412413.00N/0950047.00W	1.31	595	1394	250	50	4D	300		AC50	1760
CATEGORY B											
TOWER (19-000105)	412502.00N/0950016.00W	1.85	755	1569	250	50	4D	300		AC50	1920
CATEGORY C											
TOWER (19-000105)	412502.00N/0950016.00W	2.91	755	1569	250	50	4D	300		AC50	1920

CIRCLING REMARKS:



MSA

CENTER

RW20

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (19-000450)	412039.34N/0951521.97W	244	10.2	2836	500	50	5D	1000			3900

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH  
ZMP ARTCC, FOD FSS

<u>WX SERVICE</u> AWOS-3	<u>LOCATION</u> KAIO	<u>HRS OPERATION</u> 0	<u>ALTIMETER SOURCE</u> KAIO	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> AWOS-3	<u>LOCATION</u> KHNR	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KHNR	<u>DISTANCE</u> 16.99	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 49

WX REMARKS:  
RASS PRESSURE PATTERNS THE SAME  
KAIO 1165, KHNR 1231  
RA = 48.34.

<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>
RW02 - MIRL (PCL), REIL, PAPI-2L (PCL)		NPI-G	
RW12 - MIRL (PCL)		NPI-G	
RW20 - MIRL (PCL), REIL, PAPI-2L (PCL)		NPI-G	
RW30 - MIRL (PCL)		NPI-G	

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 1149	<u>TCH</u> 39.0	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 30.7
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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> -17C	<u>CRITICAL HIGH</u> +54C	<u>ACT</u> -17C	<u>APT ISA</u> +12.69C
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CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.  
CRITICAL LOW TEMPERATURE BASED ON ACT.  
DESCENT RATE (FPM): STANDARD TEMP 831 HIGH TEMP 1181.



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	CIRCLING RWY 12:	
20:1		
1291 TREE (19-032184) 412442.68N/0950324.92W (31.26)		1293 TREE (19-030234) 412444.14N/0950325.42W (27.63)
1293 TREE (19-030212) 412444.28N/0950327.56W (20.41)		1229 TREE (19-030233) 412437.72N/0950313.58W (19.16)
1258 TREE (19-032186) 412441.45N/0950320.33W (16.31)		1270 BUILDING (19-023222) 412443.77N/0950323.07W (13.16)
1241 TREE (19-030211) 412441.77N/0950316.22W (11.56)		1258 TRANSMISSION_LINE (19-023225) 412440.66N/0950322.66W (11.05)
1258 POLE (19-030250) 412440.66N/0950322.66W (11.05)		1248 TREE (19-030235) 412442.38N/0950318.11W (10.84)
1180 TRAVERSE_WAY (19-030301) 412434.95N/0950303.25W (10.80)		1180 TRAVERSE_WAY (19-030302) 412436.24N/0950302.53W (9.54)
1229 TREE (19-048718) 412444.32N/0950311.32W (8.17)		1272 BUILDING (19-023249) 412443.38N/0950326.74W (4.51)
1224 TRAVERSE_WAY (19-030291) 412443.40N/0950312.10W (3.22)		1216 TREE (19-030965) 412443.04N/0950310.39W (1.67)
1226 TRAVERSE_WAY (19-030292) 412442.77N/0950313.94W (1.08)		
Final Type	CIRCLING RWY 30:	
20:1		
1183 TREE (19-032274) 412418.82N/0950223.08W (37.2)		1170 TREE (19-030380) 412417.31N/0950222.39W (17.83)
1189 TREE (19-032273) 412412.21N/0950220.61W (17.07)		

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or  
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:



ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT ID</u> KAIO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 20	<u>AMDT NO.</u> 1D	<u>CITY</u> ATLANTIC	<u>STATE</u> IA	<u>AIRPORT ELEVATION</u> 1165	<u>FACILITY</u> RNAV
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	3.49			
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20			
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	201.82			
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1300			
DISTANCE FROM	THLD	TO 1500FT POINT	5.54			
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	2.60			
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	201.85			
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	1500			
THRESHOLD COORDINATES (IF STR-IN)	412428.44N/0950250.36W					
ARP COORDINATES	412413.80N/0950255.50W					
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 2 DISTANCE 0.57 NM					
FAF COORDINATES	412910.57N/0950020.36W					
FIX NAME COORDINATES						
REMARKS						
NO ADDITIONAL AIRSPACE REQUIRED.						

QUALITY

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CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

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PART E: PREPARED BY

<u>NAME</u> FRANK JACKSON JR	<u>OFFICE</u> AJV-A431	<u>DATE</u> 09/27/2022	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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