

**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</u> TUCSON INTL	<u>AIRPORT ID</u> KTUS	<u>PROCEDURE NAME</u> RNAV (GPS) Z RWY 29R	<u>ORIGINAL/AMENDMENT</u> 2E	<u>CITY</u> TUCSON	<u>STATE</u> AZ	
<u>AIRPORT ELEVATION</u> 2643	<u>TDZE</u> 2643	<u>SUPERSEDED</u> RNAV (GPS) Z RWY 29R	<u>ORIGINAL/AMENDMENT</u> 2D	<u>DATED</u> 06/20/2019	<u>MAG VAR</u> 12E	<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>
DINGO		UGETE		TF	FB	1.00	127.10	32.00	7300
UGETE		EVERE		TF	FB	1.00	127.31	12.46	7000
TUS VORTAC		EVERE		TF	FB	1.00	185.34	10.17	7000
EVERE		WAXES		TF	FB	1.00	123.01	6.00	6000
WAXES	IAF	KECED		TF	FB	1.00	033.06	5.00	5900
KECED		ATOG		TF	FB	1.00	033.09	4.00	5300
JOKIM	IAF	VEDTU		TF	FB	1.00	243.23	11.68	7800
VEDTU		ATOG		TF	FB	1.00	243.11	11.00	5300
ATOG	IF	SAXIE		TF	FB	1.00	303.12	6.03	4400
SAXIE	FAF	RW29R	MAP	TF	FO	0.30	303.08	5.27	
RW29R	MAP	2929 MSL		CA			303.08		
2929 MSL		WEDGI		DF	FB	1.00			
WEDGI		PIMMA		TF	FO	1.00	309.12	16.44	6800





MISSED APPROACH

MAP:  
LPV: DA  
LNAV/VNAV: DA  
LNAV: RW29R

MISSED APPROACH INSTRUCTIONS:  
CLIMB TO 6800 DIRECT WEDGI AND TRACK 309.12 TO PIMMA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)					
2. PROFILE STARTS AT ATOGE									
3. FAC:	303.08	FAF: SAXIE	DIST FAF TO MAP: 5.27			DIST FAF TO THLD: 5.27			
4. MIN ALT: ATOGE 5300, SAXIE 4400									
5. DIST TO THLD FROM OM:		MM:	IM:	150 HAT:	286 HAT: 0.73	GS ANT:			
6. MIN GP INCPT: 4400		GP ALT AT FAF : SAXIE 4400			OM:	MM:	IM:		
7. GP ANGLE:	3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 53.0					
8. MSA FROM: RW29R 10700									

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -3°C OR ABOVE 52°C.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON TUS VORTAC AIRWAY RADIALS 163 CW 176.  
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.88 NM TO RW29R\*  
\*LNAV ONLY  
WAAS CHANNEL #82203  
REFERENCE PATH ID: W29A  
FAS OBST: 3050 AAO 320324N/1105029W.  
HOLD SE, RT, 307.93 INBOUND  
LTP HAE: 776.1 M





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

ALTERNATE: NA ☐ STANDARD - CAT E 1200-3

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	2929	1	286	2929	1	286	2929	1	286	2929	1	286	2929	1	286
LNAV/VNAV DA	3106	1 1/2	463	3106	1 1/2	463	3106	1 1/2	463	3106	1 1/2	463	3106	1 3/4	463
LNAV MDA	3300	1	657	3300	1	657	3300	1 7/8	657	3300	2	657	3300	2 1/4	657
CIRCLING	3300	1	657	3300	1	657	3300	1 7/8	657	3300	2	657	3800	3	1157

CHANGES - REASONS

1. ADDED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - VGSI TCH CHANGED FROM 55.1 FEET TO 81 FEET, 8260.19H, 8-6-9M.
2. ADDED CHART PROFILE NOTE PROCEDURE NA FOR ARRIVAL ON TUS VORTAC AIRWAY RADIALS 163 CW 176. - TURN EXCEEDS 90 DEGREES.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZAB, TUS APPCON/ATCT, APT MGR, NGB/A306 (ANG)

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:  
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

WARDELL HENNING (THOR CORNELL)

APPROVED BY

LONNIE EVERHART

Digitally signed by  
WARDELL HENNING  
Dec 20, 2019

OFFICE

Digitally signed by DATE

WARDELL HENNING

Dec 20, 2019

OFFICE

AJV-A432

DATE

09/06/2019

OFFICE

AJV-A430

DATE

TITLE  
MANAGER





FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTUS
RUNWAY	RW29R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W29A
LTP/FTP LATITUDE	320607.1650N
LTP/FTP LONGITUDE	1105522.1455W
LTP/FTP ELLIPSOIDAL HEIGHT	+07761
FPAP LATITUDE	320724.1285N
FPAP LONGITUDE	1105652.4850W
THRESHOLD CROSSING HEIGHT (TCH)	00053.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	1ED2511B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+08056
FPAP ORTHOMETRIC HEIGHT	+08056





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

<u>AIRPORT</u> TUCSON INTL	<u>AIRPORT ID</u> KTUS	<u>PROCEDURE NAME</u> RNAV (GPS) Z RWY 29R	<u>AMDT NO.</u> 2E	<u>CITY</u> TUCSON	<u>STATE</u> AZ	<u>AIRPORT ELEVATION</u> 2643	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

<u>FROM</u> DINGO	<u>TO</u> UGETE
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<u>RNP</u>	<u>DISTANCE</u> 32.00	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
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<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>
1.AAO	322432.18N/1112932.30W	4476	20	3	1A	2000				AT824	7300
2.SPOT ELEVATION	322432.18N/1112932.30W	4276 (4300)								AS1500	5800

COMPUTATIONS

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

FEEDER: STEPDOWN

<u>FROM</u> UGETE	<u>TO</u> EVERE
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<u>RNP</u>	<u>DISTANCE</u> 12.46	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
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<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>
3.AAO	315838.26N/1110606.81W	4226	20	3	1A	2000				AT774	7000
4.TERRAIN	315838.26N/1110606.81W	4026 (4000)								AS1500	5700

COMPUTATIONS

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





FEEDER

FROM

TUS VORTAC

TO

EVERE

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	10.17											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.AAO	315443.60N/1110243.02W		3939	20	3	1A	2000				AT1061	7000
6.TERRAIN	315443.60N/1110243.02W		3739 (3700)								AS1500	5200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FEEDER: STEPDOWN

FROM

EVERE

TO

WAXES

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	6.00											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TERRAIN	314853.17N/1105022.68W		3999	250	50	4D	2000					6000
8.TERRAIN	314853.17N/1105022.68W		3999								AS1500	5500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:





INITIAL

FROM  
WAXES

TO  
KECED

RNP	DISTANCE 5.00	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
9.AAO	315015.24N/1104909.58W		4599	250	50	4D	1000					5600
10.TERRAIN	315015.24N/1104909.58W		4399 (4400)								AS1500	5900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL: STEPDOWN

FROM  
KECED

TO  
ATOGE

RNP	DISTANCE 4.00	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
11.AAO	315422.16N/1104644.74W		4572	20	3	1A	1000				SA-590 AT318	5300
12.TERRAIN	315430.00N/1104648.00W		4161 (4200)								AS1000	5200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:





INITIAL

FROM

JOKIM

TO

VEDTU

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	11.68											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
13.AAO	320424.21N/1102955.01W		6815	20	3	1A	1000				SA-780 AT765	7800
14.SPOT ELEVATION	320301.47N/1102957.79W		5184 (5200)								AS1500	6700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL: STEPDOWN

FROM

VEDTU

TO

ATOGE

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	11.00											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
15.AAO	315636.12N/1104408.78W		4221	20	3	1A	1000					5300
16.SPOT ELEVATION	315636.12N/1104408.78W		4021 (4000)								AS1000	5000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:





INTERMEDIATE

FROM  
ATOGE

TO  
SAXIE

RNP	DISTANCE 6.03	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
17.TWR (03-0445)	320011.00N/1104751.00W		3693	500	20	5C	500				AT207	4400
18.TERRAIN	315642.00N/1104742.00W		3334 (3300)								AS1000	4300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM  
SAXIE

TO  
RW29R

RNP	DISTANCE 5.27	PAT	MAP DA	HAT 286			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
19.VEGETATION (04-058618)	320603.02N/1105510.90W		2667	20	3	1A		34:1			XP36	2929

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MAINTAIN CURRENT DA





FINAL: LNAV/VNAV

FROM  
SAXIE

TO  
RW29R

<u>RNP</u>	<u>DISTANCE</u> 5.27	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 463				<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>
20.POLE (04-049232)	320527.06N/1105420.97W		2766	20	3			23.42:1			XP63	3106

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:  
MAINTAIN CURRENT DA  
FINAL: LNAV

FROM  
SAXIE

TO  
RW29R

<u>RNP</u>	<u>DISTANCE</u> 5.27	<u>PAT</u>	<u>MAP</u> RW29R	<u>HAT</u> 657			<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>
21.AAO	320324.00N/1105029.00W		3050	50	20	2C	250					3300

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  
PIMMA

RNP	DISTANCE	PAT	MAP	HAT			HMAS 2712					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				6800
22.AAO	321627.00N/1110848.00W		4887	50	20	2C	1000					5900
23.TERRAIN	321627.00N/1110848.00W		4667 (4700)								AS1500	6200

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  
PIMMA

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 2817					
<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				6800
22.AAO	321627.00N/1110848.00W		4887	50	20	2C	1000					5900
23.TERRAIN	321627.00N/1110848.00W		4667 (4700)								AS1500	6200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:





MISSED APPROACH : LNAV

FROM  
RW29R

TO  
PIMMA

RNP	DISTANCE	PAT	MAP	HAT			HMAS 3200					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				6800
22.AAO	321627.00N/1110848.00W		4887	50	20	2C	1000					5900
23.TERRAIN	321627.00N/1110848.00W		4667 (4700)								AS1500	6200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

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											
24.ATCT (04-023899)	320639.77N/1105643.80W	1.30	657	2848	20	3	1A	300		SI	3300
CATEGORY B											
25.TREE	320626.26N/1100509.79W	1.50	657	2909	50	20	2C	300		SI	3300
CATEGORY C											
26.TREE	320623.38N/1105917.61W	1.70	657	2919	50	20	2C	300		SI	3300
CATEGORY D											
26.TREE	320623.38N/1105917.61W	2.30	657	2919	50	20	2C	300		SI	3300
CATEGORY E											
27.AAO	320533.29N/1100157.19W	4.50	1157	3499	50	20	2C	300			3800

CIRCLING REMARKS:





MSA

CENTER  
RW29R

RADIUS  
25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	AAO	314202.00N/1105024.00W	158	24.4	9453	20	3	1A	1000			10700

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

TAA NOT DEVELOPED BY ATC REQUEST.





PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH  
ZAB ARTCC, TUS APP CON, TUS TOWER

WX SERVICE ASOS	LOCATION KTUS	HRS OPERATION 24	ALTIMETER SOURCE KTUS	DISTANCE 0	SERVICE-A Y	ADJUSTMENTS 0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS

WX REMARKS:  
NO BACKUP ALTIMETER DUE TO REDUNDANT WEATHER SOURCES AVAILABLE.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
APPROACH AND RUNWAY LIGHTING SYSTEM		RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW11R - MIRL, PAPI-4L		BSC-G	
RW29L - MIRL, REIL		BSC-G	
RW03 - MIRL		NPI-G	
RW21 - MIRL, REIL, PAPI-4L		NPI-G	
RW29R - HIRL, REIL, PAPI-4L		NPI-G	ROLL OUT
RW11L - MALSR, HIRL, PAPI-4L		PIR-G	APPROACH

GLIDESLOPE ANGLE 3.00	ELEV RWY THRESHOLD 2643	TCH 53.0	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE 3.00	TCH 81.0
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			
CRITICAL LOW -3C	CRITICAL HIGH +52C	ACT -3C	APT ISA +9.77C

CRITICAL TEMPERATURE REMARKS:  
AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2013-2017). CRITICAL LOW TEMPERATURE BASED ON ACT. DESCENT RATE (FPM): STANDARD TEMP 1471 HIGH TEMP 1718.





**"VISUAL PORTION OF FINAL" PENETRATIONS**

**HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS**

and/or

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

**PART C: GENERAL REMARKS:**

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

ORDER 8260.3, VOLUME 1, 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	3.60
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	315.08
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	2850
DISTANCE FROM	FAF#	TO 1500FT POINT	
WIDTH OF	INITIAL#	SEGMENT AT 1500FT POINT	
TRUE COURSE OF	INITIAL#	SEGMENT CONTAINING 1500FT POINT	
HIGH TERRAIN IN	INITIAL#	SEGMENT CONTAINING 1500FT POINT	

THRESHOLD  
COORDINATES  
(IF STR-IN)320607.16N/1105522.14W

ARP COORDINATES320657.85N/1105627.65W

RUNWAY APCH END  
AND DIST FURTHEST  
FROM ARP

RUNWAY 29R DISTANCE 1.25 NM

FAF  
COORDINATES320222.72N/1105059.11W

FIX NAME  
COORDINATES

IAF WAXES: 315143.99N/1105328.26W, IAF JOKIM: 320356.36N/1102012.22W, IF ATOGE: 315806.05N/1104558.96W

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED. #1500 FT POINT LOCATED IN INITIAL SEGMENTS: TERMINAL ROUTE WAXES TO KECED: 1500' POINT LOCATED AT KEDED, TRUE COURSE : 045.09, SEGMENT WIDTH: 4.00 NM, HIGH TERRAIN: 4161 TERMINAL ROUTE JOKIM TO VEDTU: 1500' POINT LOCATED 9.48NM FROM VEDTU, TRUE COURSE: 255.11, SEGMENT WIDTH: 4.00 NM, HIGH TERRAIN: 4021 KECED: 315516.3N/1104918.77W VEDTU: 320056.61N/1103329.15W





PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
WARDELL HENNING (THOR CORNELL)	AJV-A432	09/06/2019	AERONAUTICAL INFORMATION SPECIALIST

