

<b>US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION</b>				<b>RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33</b>				Bearings, headings, courses, 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 in feet RVR.								
TERMINAL ROUTES										MISSED APPROACH						
FROM		TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW24  CLIMB TO 3000 DIRECT ZUFIL AND HOLD.  ADDITIONAL FLIGHT DATA: HOLD SW, RT, 066.52 INBOUND. CHART FAS OBST: 789 TREE 411801N/0830012W. DISTANCE TO THLD FROM 220 HAT: 0.56 NM. CHART VDP AT 1.07 NM TO RW24* *LNAV ONLY. WAAS CHANNEL # 42822 REFERENCE PATH ID: W24A CHART CIRCLING ICON. LTP HAE: 164.7 M						
HUDDZ (IAF)		OBOZE (NOPT) (TF) (FB) (RNP 1.00)			293.53 / 15.41			3000								
OBOZE (IF/IAF)		EXKUP (TF) (FB) (RNP 1.00)			246.77 / 5.00			2300								
EXKUP (FAF)		AKEYE/1.80 NM TO RW24 (TF) (FB) (RNP 0.30)			246.71 / 3.23											
AKEYE/1.80 NM TO RW24		RW24 (MAP) (TF) (FO) (RNP 0.30)			246.71 / 1.80											
RW24 (MAP)		885 MSL (CA)			246.71			3000								
885 MSL		ZUFIL (DF) (FO) (RNP 1.00)														
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NE OBOZE, LT, 246.77 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 246.71 FAF: EXKUP DIST FAF TO MAP: 5.03 THLD: 5.03 4. MIN. ALT: OBOZE 3000, EXKUP 2300, AKEYE/1.80 NM TO RW24 1260* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2300 GS ALT AT: EXKUP 2300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 42.4 20:1 IS CLEAR 34:1 IS CLEAR 8. MSA FROM: RW24 3100																
										MAG VAR: 7W			EPOCH YEAR: 2000			
MINIMUMS																
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A <input checked="" type="checkbox"/> X								
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LPV DA	885	3/4	220	885	3/4	220	885	3/4	220	885	3/4	220				
LNAV/VNAV DA	1103	1 1/2	438	1103	1 1/2	438	1103	1 1/2	438	1103	1 1/2	438				
LNAV MDA	1040	1	375	1040	1	375	1040	1 1/8	375	1040	1 1/8	375				
CIRCLING	1120	1	455	1160	1	495	1380	2	715	1380	2 1/4	715				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F). CHART NOTE: BARO-VNAV AND VDP NA WHEN USING TOLEDO EXPRESS ALTIMETER SETTING. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE TOLEDO EXPRESS ALTIMETER SETTING: INCREASE LPV DA TO 978 FEET AND ALL VISIBILITIES 3/8 SM; INCREASE LNAV/VNAV DA TO 1196 FEET AND ALL VISIBILITIES 3/8 SM; (CONTINUED ON PAGE 2)																
CITY AND STATE FREMONT, OH				ELEVATION: 665 TDZE: 665 AIRPORT NAME: SANDUSKY COUNTY RGNL				FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 24, AMDT 1A				SUP: AMDT: 1 DATED 11/13/2014		



ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
ROUTINE					
COORDINATED WITH:					
ATA <div></div>		AAT <div></div>		ALPA <div>X</div>	
APA <div></div>		AOPA <div>X</div>		NBAA <div>X</div>	
OTHER (specify)		<div>X</div> ZOB, TOL ATCT, MFD ATCT, AMGR			
Digitally signed by					
FLIGHT CHECKED BY DION E LANCIA					
NAME:		Jan 09, 2018		FIFO	DATE:
FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-333) MEMO, DEC 22, 2017.					
DEVELOPED BY Digitally signed by					
NAME:		JOHN HAZELTON		FIFO	DATE:
		Dec 11, 2017		AJV-5421	11/30/2017
APPROVED BY					
NAME:		Digitally signed by		FIFO	DATE:
JULIE A. MORGAN		DION E LANCIA		AJV-5420	
		MANAGER			
CHANGES: Jan 09, 2018					
<div>1. CHANGED INTERMEDIATE RNP FROM 0.50 TO 1.00. UPDATED MISSED TERMINAL ROUTE ADDING RNP 1.00.</div> <div>2. ADDED 20:1 IS CLEAR TO LINE 7.</div> <div>3. DELETED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HUDDZ ON V426-584 EASTBOUND.</div> <div>4. UPDATED CHART NOTE: VDP NA WITH TOLEDO EXPRESS ALTIMETER SETTING AND CHART NOTE: BARO-VNAV NA WITH TOLEDO EXPRESS ALTIMETER SETTING TO BARO-VNAV AND VDP NA WHEN USING TOLEDO EXPRESS ALTIMETER SETTING.</div> <div>5. CHANGED BACKUP ALTIMETER NOTE FROM WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE TOLEDO EXPRESS ALTIMETER SETTING AND INCREASE ALL DA 93 FEET AND ALL MDA 100 FEET; INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 3/8 MILE, LNAV CAT C AND D VISIBILITY 1/4 MILE AND CIRCLING CAT C AND D VISIBILITY 1/2 MILE TO WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE TOLEDO EXPRESS ALTIMETER SETTING: INCREASE LPV DA TO 978 FEET AND ALL VISIBILITIES 3/8 SM; INCREASE LNAV/VNAV DA TO 1196 FEET AND ALL VISIBILITIES 3/8 SM; INCREASE ALL MDA 100 FEET AND LNAV VISIBILITY CAT C AND D 1/4 SM AND CIRCLING VISIBILITY CAT C AND D 1/2 SM.</div> <div>6. DELETED CHART NOTE DME/DME RNP-0.3 NA. ADDED PBN REQUIREMENTS NOTE RNP APCH.</div>					
REASONS:					
<div>1-2, 4-6. CURRENT CRITERIA DOCUMENTATION.</div> <div>3. PER IAP CHECKLIST</div>					



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION  
**RNAV - STANDARD**  
**INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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**NOTES, (CONT.):**

**INCREASE ALL MDA 100 FEET AND LNAV VISIBILITY CAT C AND D 1/4 SM AND CIRCLING VISIBILITY CAT C AND D 1/2 SM.**

**PBN REQUIREMENTS NOTE: RNP APCH.**

QUALITY  
6  
CHECKED

CITY AND STATE <b>FREMONT, OH</b>	ELEVATION: 665 AIRPORT NAME: <b>SANDUSKY COUNTY RGNL</b>	TDZE: 665  <b>RNAV</b>	FACILITY IDENTIFIER:  <b>RNAV</b>	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: <b>RNAV (GPS) RWY 24, AMDT 1A</b>	SUP:
					AMDT: 1
					DATED: 11/13/2014

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE  
FLIGHT STANDARDS SERVICE - FAR PART 97.33**

Bearings, headings, courses, 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 in feet RVR.

**FAS DATA BLOCK INFORMATION**

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	S24
RUNWAY	RW24
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W24A
LTP/FTP LATITUDE	411758.3875N
LTP/FTP LONGITUDE	0830142.8815W
LTP/FTP ELLIPSOIDAL HEIGHT	+01647
FPAP LATITUDE	411713.3300N
FPAP LONGITUDE	0830324.8700W
THRESHOLD CROSSING HEIGHT (TCH)	00042.4
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 188B8A28

**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01999
FPAP ORTHOMETRIC HEIGHT	+01999

QUALITY  
6  
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CITY AND STATE  FREMONT, OH	ELEVATION: 665 AIRPORT NAME:  SANDUSKY COUNTY RGNL	TDZE: 665  RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:  RNAV (GPS) RWY 24, AMDT 1A	SUP:
				AMDT: 1
				DATED: 11/13/2014

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD																			
PART - A OBSTRUCTION DATA																			
1. APP SEGMENT		FROM		TO		OBSTRUCTION		COORDINATES		ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.						
INITIAL		HUDDZ		OBOZE		1. TOWER (39-000745)		412348.00N/0824731.00W		1436 (3C)	1000	AT564	3000						
						2. TERRAIN		412006.00N/0822845.00W		847 (800)		AS1500	2300						
INTERMEDIATE		OBOZE (IF/IAF)		EXKUP		3. TOWER (39-020024)		412238.00N/0824852.00W		1070 (5D)	1000		2100						
						4. TERRAIN		412251.00N/0824945.00W		831 (800)		AS1500	2300						
FINAL: LPV		EXKUP		RW24							ASC	MA20	885/220						
FINAL: LNAV/VNAV		EXKUP		RW24		5. TREE		411800.62N/0830011.96W		789 (2C)	23.44:1	AC20	1103/438						
FINAL: LNAV		EXKUP		AKEYE/1.80 NM TO		6. AAO		411938.96N/0825458.42W		909 (2C)	250	RA93	1260						
				RW24															
FINAL: LNAV STEPDOWN		AKEYE/1.80 NM TO		RW24		5. TREE		411800.62N/0830011.96W		789 (2C)	250		1040						
		RW24																	
2. HOLD-IN-LIEU-OF-PT		OBOZE		P-5		1. TOWER (39-000745)		412348.00N/0824731.00W		1436 (3C)	1000	AT564	3000						
						7. TERRAIN		412251.00N/0824945.00W		831 (800)		AS1500	2300						
3. MISSED APPROACH		MAP: DA / DA / RW24		ZUFIL		8. TREE (KS24T0104)		411809.17N/0830137.12W		737 (1A)	ASC		3000						
						9. TOWER (39-020906)		411432.01N/0831401.01W		997 (1A)	1000		2000						
		ELEV: 702/933/940				10. TERRAIN		411327.00N/0831339.00W		755 (800)		AS1500	2300						
4. CIRCLING AREA		DISTANCE		HT. ABV. ARPT.															
CATEGORY A		1.3 NM		REQUIRED 350 450 450 550 550 ACTUAL		455		11. TREE		411653.00N/0830128.00W		815 (2C)	300		1120				
CATEGORY B		1.5 NM				495		12. TANK (39-023649)		411557.20N/0830310.68W		848 (1B)	300		1160				
CATEGORY C		1.7 NM				715		13. TOWER (39-001913)		411949.00N/0830309.00W		1028 (5D)	300	AC50	1380				
CATEGORY D		2.3 NM				715		13. TOWER (39-001913)		411949.00N/0830309.00W		1028 (5D)	300	AC50	1380				
CATEGORY E		4.5 NM																	
5. MINIMUM SAFE ALTITUDES													PRIMARY NAVAID: RW24						
SECTOR		OBSTRUCTION		BRG/DIST		ELEVATION (MSL)		M S A		SECTOR		OBSTRUCTION		BRG/DIST		ELEVATION (MSL)		M S A	
360-360		TWR (39-000350)		333/26.6		2016 (5D)		3100											
CITY AND STATE				ELEVATION: 665				FACILITY				PROCEDURE AND AMENDMENT NO:				REGION			
FREMONT, OH				AIRPORT NAME: SANDUSKY COUNTY RGNL				RNAV				RNAV (GPS) RWY 24, AMDT 1A				AGL			

QUALITY  
6

CHECKED

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:  PRECIPITOUS TERRAIN EVALUATION COMPLETED.  CRITICAL TEMPERATURES: CRITICAL LOW :-16C (+4F) CRITICAL HIGH :+54C (+130F) ACT :-16C APT ISA :+13.68C  CRITICAL TEMPERATURE REMARKS AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION CRITICAL LOW TEMPERATURE BASED ON ACT. DESCENT RATE (FPM): STANDARD TEMP 963 HIGH TEMP 1124.  ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED. CAT A: 1.30NM CAT B: 1.83NM CAT C: 2.87NM CAT D: 3.75NM  NO ADDITIONAL AIRSPACE REQUIRED. RASS PRESSURE PATTERNS THE SAME KS24 665, KTOL 683 RA = 92.1.  VGSI DATA: 3.00/42.4 LPV SLOPE: 34:1 LNAV/VNAV SLOPE: 23.44:1  100FT VEGETATION HEIGHT USED  ACCEPTABLE FIXED BY FUNCTION GQS PENETRATIONS: 659 NAVAID (KS24T0003) 411757.79N/0830141.81W (2.60) 658 NAVAID (KS24T0004) 411759.38N/0830143.05W (0.72) FPO DESCRIBED AS BEING THE REILS.	
1. COMMUNICATIONS WITH:			2. WEATHER SERVICE			3. ALTIMETER SETTING					
MFD TOWER CLE FSS ZOB ARTCC TOL TOWER				N W S	OTHER: AWOS-3		SOURCE:KS24 / KTOL				
				F A A			DISTANCE: 0 / 38.84				
				A / C			HOURS REMOTE OPERATION: 24/NO / 24/YES				
SATISFACTORY ON:											
X	V H F	X	U H F		H F	LOCATION: KS24			ADJUSTMENT: 0 / 93		
4. MONITOR STATUS	PRIMARY NAVAID:										
	MONITOR POINT:										
	HRS	OPTN:	CAT 1								
5. APPROACH & RUNWAY LIGHTING											
	X										
	X										
6. RUNWAY MARKINGS											
7. RUNWAY VISUAL RANGE											
8. GLIDE PATH											
9. FINAL APPROACH COURSE AIMING											
10. WAIVERS: NONE											
PART D - PREPARED BY: JOHN HAZELTON										DATE: 11/30/2017	
TITLE: AERONAUTICAL INFORMATION SPECIALIST										OFFICE: AJV-5421	

