

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR 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.													
US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION																	
TERMINAL ROUTES										MISSED APPROACH							
FROM	TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW18L CLIMB TO 900 THEN CLIMBING LEFT TURN TO 5000 DIRECT KEEZE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 333.00 INBOUND. CHART FAS OBST: 621 CONTROL_TOWER 350259N/0895854W. DISTANCE TO THLD FROM 256 HAT: 0.69 NM. CHART VDP AT 1.66 NM TO RW18L* *LNAV ONLY. WAAS CHANNEL # 53307 REFERENCE PATH ID: W18B CHART CIRCLING ICON. CHART LOC RWY 18R LTP HAE: 57.2 M								
GQE VOR/DME	ZOKOR (TF) (FB) (RNP 2.00)			107.90 / 17.70			4400										
MIOLA	TUNIE (TF) (FB) (RNP 2.00)			240.35 / 25.24			4400										
MEM VORTAC	REISE (TF) (FO) (RNP 2.00)			002.08 / 14.85			4400										
ZOKOR (IAF)	REISE (NOPT) (TF) (FB) (RNP 1.00)			089.91 / 7.67			4400										
TUNIE (IAF)	REISE (NOPT) (TF) (FB) (RNP 1.00)			270.07 / 6.89			4400										
(SEE FORM 8260-10)																	
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N REISE, LT, 180.00 INBOUND, 4400 FT. IN LIEU OF PT (IAF) 3. FAC: 180.00 FAF: RONEE _____ DIST FAF TO MAP: 5.15 THLD: 5.15 4. MIN. ALT: REISE 4400, RONEE 2000 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2000 GS ALT AT: RONEE 2000 _____ OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 60.0 34:1 IS CLEAR 8. MSA FROM: RW18L 2500																	
										MAG VAR: 1W EPOCH YEAR: 2020							
MINIMUMS																	
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT										ALTERNATE: N A		STANDARD @					
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	557	1800	256	557	1800	256	557	1800	256	557	1800	256					
LNAV/VNAV DA	874	1 1/2	573	874	1 1/2	573	874	1 1/2	573	874	1 1/2	573					
LNAV MDA	880	2400	579	880	2400	579	880	5000	579	880	6000	579					
CIRCLING	940	1	599	940	1	599	940	1 1/2	599	1020	2 1/4	679					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 48C (118F). @ CAT D 800-2 1/4 CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MIOLA ON V11 NORTH BOUND. (CONTINUED ON PAGE 2)																	
CITY AND STATE				ELEVATION: 341 TDZE: 301				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:	
MEMPHIS, TN				AIRPORT NAME:								RNAV (GPS) Z RWY 18L, AMDT 2D				AMDT: 2C	
				MEMPHIS INTL												DATED 10/12/2017	



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><input checked="" type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>		ALPA <div><input checked="" type="checkbox"/></div>	
APA <div><input checked="" type="checkbox"/></div>		AOPA <div><input checked="" type="checkbox"/></div>		NBAA <div><input checked="" type="checkbox"/></div>	
OTHER (specify)		<div><input checked="" type="checkbox"/> ZME, MEM ATCT, KMEM AMGR, MEM APP/CON</div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME: <div>LIAM DONAHUE</div>				FIFO AJV-5431	DATE: 08/22/2017
Nov 14, 2017 APPROVED BY					
NAME: <div>PATRICK MULQUEEN</div>				FIFO AJV-5430	DATE:
MANAGER					
CHANGES:					
<div>1. CHANGED LPV DA VISIBILITY FROM RVR 2400 TO RVR 1800 ALL CATS. 2. REPLACED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MIOLA VIA V11 NORTHBOUND WITH PROCEDURE NA FOR ARRIVALS AT MIOLA ON V11 NORTHBOUND. 3. ADDED 2 DEGREES TO ALL COURSES AND HEADINGS. 4. CHANGED MALSRs TO ALS IN INOPERATIVE NOTE. 5. DELETED "PROVIDING RNAV TRACK GUIDANCE" FROM FD OR AP REQUIRED NOTE. 6. EXPANDED CIRCLING AREA AND RAISED CAT D MINIMUMS FROM 940-2 TO 1020-2 1/4. 7. CHANGED PROCEDURE NA FOR ARRIVALS ON GQE VOR/DME AIRWAY RADIALS FOR 050 CW 121 TO 050 CW 188.</div>					
REASONS:					
<div>1. AMDT 2C BY P-NOTAM IAW MEMORANDUM FROM AFS-400 AUTHORIZING 1800 RVR FOR LPV AND GLS APPROACH PROCEDURES. 2. AMDT 2C BY P-NOTAM TO CHANGE "VIA" TO "ON". THE WORD "VIA" NO LONGER USED. 3. AIRPORT MAGNETIC VARIATION UPDATED FROM 1E/EPOCH YEAR 2000 TO 1W/EPOCH YEAR 2020. 4. FAAO 8260.19G PARAGRAPH 8-6-5. 5. FAAO 8260.19H PARAGRAPH 8-6-9. 6. FAAO 8260.3C VOLUME 1 CHAPTER 2. (FLIGHT CHECKED ON THE RWY 27 PROCEDURES THIS AIRPORT.) 7. FAAO 8260.3C SECTION 2-3.</div>					



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

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
REISE (IF/IAF)	RONEE (TF) (FB) (RNP 1.00)	180.00 / 7.68	2000
RONEE (FAF)	RW18L (MAP) (TF) (FO) (RNP 0.30)	180.00 / 5.15	
RW18L (MAP)	900 MSL (CA)	180.00	900
900 MSL	KEEZE (DF) (FO) (RNP 1.00)		5000

NOTES, (CONT.):

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GQE VOR/DME AIRWAY RADIALS 050 CW 188.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO RVR 5000.

QUALITY
23
CHECKED

CITY AND STATE MEMPHIS, TN	ELEVATION: 341 TDZE: 301 AIRPORT NAME: MEMPHIS INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) Z RWY 18L, AMDT 2D	SUP:
				AMDT: 2C
				DATED: 10/12/2017

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>		<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**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMEM
RUNWAY	RW18L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18B
LTP/FTP LATITUDE	350255.7385N
LTP/FTP LONGITUDE	0895822.6250W
LTP/FTP ELLIPSOIDAL HEIGHT	+00572
FPAP LATITUDE	350126.5090N
FPAP LONGITUDE	0895820.7305W
THRESHOLD CROSSING HEIGHT (TCH)	00060.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0008
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

935B60A2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00846
FPAP ORTHOMETRIC HEIGHT	+00846

QUALITY
23
CHECKED

CITY AND STATE MEMPHIS, TN	ELEVATION: 341 AIRPORT NAME: MEMPHIS INTL	TDZE: 301 MEMPHIS INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) Z RWY 18L, AMDT 2D	SUP:
					AMDT: 2C
					DATED: 10/12/2017

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.			
FEEDER	GQE VOR/DME	ZOKOR	1. TOWER (05-001517)	351804.00N/0901934.00W	564 (2D)	1000	AT2836	4400			
			2. TERRAIN	352103.00N/0901500.00W	233 (200)		AS1500	1700			
FEEDER	MIOLA	TUNIE	3. TOWER (47-001735)	351633.00N/0894638.00W	1449 (5D)	1000	AT1951	4400			
			4. TERRAIN	352318.00N/0894418.00W	414 (400)		AS1500	1900			
FEEDER	MEM VORTAC	REISE	5. TOWER (47-000104)	351322.00N/0900237.00W	849 (4D)	1000	AT2551	4400			
			6. TERRAIN	350845.00N/0900258.00W	430 (400)		AS1500 AS1500	1900			
INITIAL	ZOKOR	REISE	7. TOWER (47-000105)	351511.00N/0900259.00W	600 (4D)	1000	AT2800	4400			
			8. TERRAIN	351754.00N/0900303.00W	335 (300)		AS1500	1800			
INITIAL	TUNIE	REISE	9. TOWER (47-002622)	351234.34N/0894901.44W	1182 (4D)	1000	AT2218	4400			
			10. TERRAIN	351415.00N/0895318.00W	368 (400)		AS1500	1900			
INTERMEDIATE	REISE (IF/IAF)	RONEE	5. TWR (47-000104)	351322.00N/0900237.00W	849 (4D)	500	DG651	2000			
			11. TERRAIN	351333.00N/0895442.00W	368 (400)		AS1500	1900			
FINAL: LPV	RONEE	RW18L	12. POLE (KMEM0066)	350336.14N/0895821.01W	337 (1A)	27.03:1		557/256			
FINAL: LNAV/VNAV	RONEE	RW18L	13. ATCT (47-020204)	350258.77N/0895853.89W	621 (1A)	PDA		874/573			
2. HOLD-IN-LIEU-OF-PT	REISE	P-6	5. TOWER (47-000104)	351322.00N/0900237.00W	849 (4D)	1000	AT2551	4400			
			14. TERRAIN	352553.60N/0895610.10W	455 (500)		AS1500	2000			
3. MISSED APPROACH	MAP: DA / DA / RW18L	KEEZE				ASC		5000			
	ELEV: 337/561/630		15. TOWER (28-001642)	345144.34N/0895242.31W	949 (5E)	1000		2000			
			16. TERRAIN	345324.00N/0895109.00W	407 (400)		AS1500	1900			
4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.									
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	599	13. ATCT (47-020204)	350258.77N/0895853.89W	621 (1A)	300		940
CATEGORY B	1.5 NM		450		599	13. ATCT (47-020204)	350258.77N/0895853.89W	621 (1A)	300		940
CATEGORY C	1.7 NM		450		599	13. ATCT (47-020204)	350258.77N/0895853.89W	621 (1A)	300		940
CATEGORY D	2.3 NM		550		679	17. TOWER (47-001162)	350556.33N/0900226.33W	653 (1D)	300	AC50	1020
CATEGORY E	4.5 NM		550								
5. MINIMUM SAFE ALTITUDES				PRIMARY NAVAID: RW18L							
SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A		
360-360	TWR (05-000947)	338/27.3	1486 (5D)	2500							
CITY AND STATE		ELEVATION: 341		FACILITY		PROCEDURE AND AMENDMENT NO:		REGION			
MEMPHIS, TN		AIRPORT NAME: MEMPHIS INTL		RNAV		RNAV (GPS) Z RWY 18L, AMDT 2D		ASO			

 QUALITY
 23
 CHECKED

PART B - SUPPLEMENTAL DATA										PART C - REMARKS: PRECIPITOUS TERRAIN EVALUATION COMPLETED. ASOS CONNECTED TO WMSCR. BACKUP ALTIMETER NOT REQUIRED DUE TO REDUNDANT LOCAL SOURCES. VGSI TCH/ANGLE: 73°/3.00 DEGREES. ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED. CAT A: 1.30NM CAT B: 1.82NM CAT C: 2.85NM CAT D: 3.73NM NO ADDITIONAL AIRSPACE REQUIRED. LPV SURFACE: 34:1 LNAV/VNAV SURFACE: 23.4:1 ISA DEVIATION: -30 BARO/VNAV NA BELOW -15C (5F) AND ABOVE 48C (118F). CONTINUOUS DESCENT ANGLE APPLIED FROM REISE TO RWY18L PER FPT/ATC. 100 FT VEGETATION USED PER FPT.																			
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE				3. ALTIMETER SETTING																					
MEM TOWER MEM APP CON						N W S		OTHER: ASOS												SOURCE:KMEM									
						F A A														DISTANCE:									
						A / C														HOURS REMOTE OPERATION: 24/YES									
SATISFACTORY ON:																													
X		V H F		X		U H F														H F		LOCATION: KMEM				ADJUSTMENT: 0			
4. MONITOR STATUS		PRIMARY NAVAID:																											
		MONITOR POINT:																											
		HRS OPTN:		CAT 1																									
				CAT 3																									
5. APPROACH & RUNWAY LIGHTING		X		ALSF-2 36C, 36L, 36R																									
				(S) SALS																									
		X		MALSR 09, 18C, 18L, 18R, 27																									
		X		HIRL 09, 18C, 18L, 18R, 27, 36C, 36L, 36R																									
				MIRL																									
				REIL																									
		X		TDZ 18C, 18L, 18R, 36C, 36L, 36R																									
		X		C/L 09, 18C, 18L, 18R, 27, 36C, 36L, 36R																									
X		OTHER (SPECIFY) PAPI-4R 36R TAXI WAY 18L PAPI-4L 18L, 27, 36L																											
6. RUNWAY MARKINGS				BASIC																									
				ALL WEATHER PIR-G 09, 18C, 18L, 18R, 27, 36C, 36L, 36R																									
				INSTRUMENT																									
7. RUNWAY VISUAL RANGE				APPROACH 09, 18C, 18L, 18R, 27, 36C, 36L, 36R																									
				MIDFIELD 18C, 18L, 18R, 36C, 36L, 36R																									
				ROLL OUT 09, 18C, 18L, 18R, 27, 36C, 36L, 36R																									
8. GLIDE PATH				GP ANGLE: 3.00								ELEV RWY THRESHOLD:277.5																	
				DISTANCE FROM RWY:								ELEV GP ANTENNA:																	
												THRESHOLD CROSSING HEIGHT:60.0																	
9. FINAL APPROACH COURSE AIMING						X		RUNWAY THRESHOLD										FT. FROM THRESHOLD											
						X		ON CENTERLINE										FT. FROM CENTERLINE											
10. WAIVERS: NONE																													
PART D - PREPARED BY: LIAM DONAHUE												DATE: 08/22/2017																	
TITLE: AERONAUTICAL INFORMATION SPECIALIST												OFFICE: AJV-5431																	



STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD		
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	PART - A OBSTRUCTION DATA
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[illegible]

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:	
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE			3. ALTIMETER SETTING				
SATISFACTORY ON:					N W S	OTHER:		SOURCE:			
					F A A			DISTANCE:			
					A / C			HOURS REMOTE OPERATION:			
	V H F		U H F		H F	LOCATION:			ADJUSTMENT:		
4. MONITOR STATUS		PRIMARY NAVAID:									
		MONITOR POINT:									
		HRS	CAT 1								
		OPTN:	CAT 3								
5. APPROACH & RUNWAY LIGHTING			ALS								
			(S) SALS								
			MALS								
			HIRL								
			MIRL								
			REIL								
			TDZ								
			C/LINE								
6. RUNWAY MARKINGS		BASIC									
		ALL WEATHER									
		INSTRUMENT									
7. RUNWAY VISUAL RANGE		APPROACH									
		MIDFIELD									
		ROLL OUT									
8. GLIDE PATH		GP ANGLE:				ELEV RWY THRESHOLD:					
		DISTANCE FROM RWY:				ELEV GP ANTENNA:					
						THRESHOLD CROSSING HEIGHT:					
9. FINAL APPROACH COURSE AIMING				RUNWAY THRESHOLD					FT. FROM THRESHOLD		
				ON CENTERLINE					FT. FROM CENTERLINE		
10. WAIVERS:											
PART D - PREPARED BY:										DATE:	
TITLE:										OFFICE:	