

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29**

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> NQA	<u>PROCEDURE NAME</u> ILS OR LOC RWY 22	<u>ORIGINAL/AMENDMENT</u> 7	<u>CITY</u> MILLINGTON	<u>STATE</u> TN
<u>AIRPORT ELEVATION</u> 322	<u>TDZE</u> 322	<u>SUPERSEDED</u> ILS OR LOC RWY 22	<u>DATED</u> 07/14/2022	<u>MAG VAR</u> 0E
<u>FACILITY</u> I-NQA	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>EPOCH YEAR</u> 2000
				<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
RYBRN/I-NQA 12.58 DME/RADAR	IF/IAF	PIRGE/I-NQA 6.58 DME/RADAR					218.90	6.01 (I-NQA)	2000

MISSED APPROACH

MAP:

ILS: DA
LOC: I-NQA 1.48 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 3000 AND ON MEM VORTAC R-002 TO OZSOM/MEM 23.82 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 270 FOR RADAR VECTORS.

PROFILE:

1. **PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF** (IAF)
2. HOLD NE RYBRN, RT, 218.90 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 4700.
3. **FAC:** 218.90 **FAF:** PIRGE/I-NQA 6.58 DME/RADAR **DIST FAF TO MAP:** **DIST FAF TO THLD:** 5.09
4. **MIN ALT:** RYBRN/I-NQA 12.58 DME/RADAR 2500, PIRGE/I-NQA 6.58 DME/RADAR 2000, NEUME/I-NQA 3.59 DME 1040
5. **DIST TO THLD FROM FAF:** 5.09 **MM:** **IM:** **150 HAT:** **GS ANT:** 1085
6. **MIN GS INCPT:** 2000 **GS ALT AT PFAF:** PIRGE/I-NQA 6.58 DME/RADAR 2000 **OM:** **MM:** **IM:**
7. **GS ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 55.3
8. **MSA FROM:** MEM VORTAC 2500



EQUIPMENT REQUIREMENTS NOTES:

RADAR REQUIRED FOR PROCEDURE ENTRY.
DME REQUIRED.

NOTES:

CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: S-ILS 22 PROCEDURE NA WHEN CONTROL TOWER CLOSED IF CEILING/VISIBILITY LOWER THAN 800/2.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 22 CAT E VISIBILITY TO 3/4 SM AND S-LOC 22 CAT E VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

HOLD S, RT, 001.83 INBOUND.
CHART FAS OBST: 513 TREE (47-052322) 352310N/0895006W.
CHART VDP AT 2.70 DME.
DISTANCE VDP TO THLD 1.22 NM.
CHART CIRCLING ICON.

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED., NA WHEN LOCAL WEATHER NOT AVAILABLE.; LOC: STANDARD - CAT E 800-2 1/4, NA WHEN CONTROL TOWER CLOSED., 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
S-ILS 22	522	1/2	200	522	1/2	200	522	1/2	200	522	1/2	200	522	1/2	200
S-LOC 22	780	1/2	458	780	1/2	458	780	7/8	458	780	7/8	458	780	7/8	458
CIRCLING	800	1	478	820	1	498	920	1 1/2	598	960	2	638	960	2 1/4	638

CHANGES - REASONS

1. ADDED "CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 3000 ON HEADING 270 FOR RADAR VECTORS" TO ALTERNATE MISSED APPROACH INSTRUCTIONS – IAW 8260.3E, 2-8; PER FPT REQUEST.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZME, MEM APP CON, AMGR, NQA ATCT

FLIGHT CHECKED BY

ROBERT E WILLIAMS

Digitally signed by

ERIC N SUSKI

Aug 12, 2024

OFFICE

FPO

DATE

08/08/2024

DEVELOPED BY

ERIC N SUSKI (JOSHUA C. JUONI)

Digitally signed by

ERIC N SUSKI

Apr 19, 2024

OFFICE

AJV-A431

DATE

01/12/2024

APPROVED BY

ERIC N SUSKI

Digitally signed by

ERIC N SUSKI

Apr 19, 2024

OFFICE

AJV-A431

DATE

07/11/2024

TITLE

MANAGER



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

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
NQA	ILS OR LOC RWY 22	7	MILLINGTON	TN	322	I-NQA

PART A: OBSTRUCTION DATA SEGMENTS

INTERMEDIATE

FROM RYBRN/I-NQA 12.58 DME/RADAR (IF/IAF) **TO** PIRGE/I-NQA 6.58 DME/RADAR

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>			<u>HMAS</u>		
	6.01										
<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 (47-002180)	352651.08N/0894339.44W	816	20	3	1A	500					1400
TERRAIN	352654.00N/0894736.00W	452 (500)								AS1500	2000

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: ILS

FROM PIRGE/I-NQA 6.58 DME/RADAR **TO** RW22

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
	5.09		DA				200				
<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				522

COMPUTATIONS

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

SEGMENT REMARKS:



FINAL: LOC

FROM

PIRGE/I-NQA 6.58 DME/RADAR

TO

NEUME/I-NQA 3.59 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>			<u>HMAS</u>		
	2.99										
<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	352639.00N/0894803.00W	643	215	8	4B	250				RA60 DG87	1040

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LOC STEPDOWN

FROM

NEUME/I-NQA 3.59 DME

TO

I-NQA 1.48 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
	2.10		I-NQA 1.48 DME				458				
<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 (47-052322)	352309.69N/0895006.18W	513	20	3	1A	250					780

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

RYBRN/I-NQA 12.58 DME/RADAR

TO

P-8

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u> P-8	<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 (47-000949)	353309.00N/0894227.00W	860	500	50	5D	1000				AT640	2500
TERRAIN	354254.00N/0893400.00W	475 (500)								AS1500	2000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSSED APPROACH: ILS

FROM

DA

TO

OZSOM/MEM 23.82 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 354			
<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				3000
TOWER (47-001165)	352054.31N/0895916.32W	685	500	50	5D	1000					1700
TERRAIN	352451.00N/0895836.00W	439 (400)								AS1500	1900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH: LOC

FROM

I-NQA 1.48 DME

TO

OZSOM/MEM 23.82 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
								530			
<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				3000
TOWER (47-001165)	352054.31N/0895916.32W	685	500	50	5D	1000					1700
TERRAIN	352451.00N/0895836.00W	439 (400)								AS1500	1900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH ALTERNATE: ILS

FROM

DA

TO

3000 MSL

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
								354			
<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				3000
TOWER (47-001165)	352054.31N/0895916.32W	685	500	50	5D	1000					1700
TERRAIN	352157.00N/0900139.00W	423 (400)								AS1500	1900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSSED APPROACH ALTERNATE: LOC

FROM

I-NQA 1.48 DME

TO

3000 MSL

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 530			
<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				3000
TOWER (47-001165)	352054.31N/0895916.32W	685	500	50	5D	1000					1700
TERRAIN	352157.00N/0900139.00W	423 (400)								AS1500	1900

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											
TREE (47-052654)	352258.19N/0895059.43W	1.30	478	495	20	3	1A	300			800
CATEGORY B											
TREE (47-052168)	352243.40N/0894954.13W	1.82	498	507	20	3	1A	300			820
CATEGORY C											
TOWER (47-001208)	352403.23N/0895322.25W	2.85	598	610	20	3	1A	300			920
CATEGORY D											
TOWER (47-000476)	352457.53N/0895242.84W	3.73	638	660	20	3	1A	300			960
CATEGORY E											
TOWER (47-000476)	352457.53N/0895242.84W	4.66	638	660	20	3	1A	300			960

CIRCLING REMARKS:

MSA

CENTER

MEM VORTAC

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (05-000947)	352802.00N/0901127.00W	338	28.9	1486	500	50	5D	1000			2500

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

NQA TOWER, ZME ARTCC, MEM TRACON

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS
AWOS-3	NQA	24	NQA	0	Y	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS
ASOS	MEM	24	MEM	18.87	Y	54

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KNQA 322, KMEM 252
RA = 53.3.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
I-NQA	NQA ATCT	WHEN TOWER OPEN WHEN TOWER CLOSED	1 3

APPROACH AND RUNWAY LIGHTING SYSTEM	RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW04 - REIL (PCL), HIRL (PCL), PAPI-4L	PIR-G	
RW22 - MALSR (PCL), REIL (PCL), HIRL (PCL), PAPI-4L	PIR-G	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
3.00	322.3	55.3	320.4	1085	3.00	67.3

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	☒	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	☒	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
--------------	---------------	-----	---------

CRITICAL TEMPERATURE REMARKS:



AIRPORT ID
NQA

PROCEDURE NAME
ILS OR LOC RWY 22

AMDT NO.
7

CITY
MILLINGTON

STATE
TN

AIRPORT ELEVATION
322

FACILITY
I-NQA

"VISUAL PORTION OF FINAL" PENETRATIONS

PENETRATIONS REMARKS:

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.

VEGETATION HEIGHT: 100' PER FPT.

CONTINGENCY ALTIMETER NOTE:

WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE MEMPHIS INTL ALTIMETER SETTING: INCREASE S-ILS 22 DA TO 576 FEET; INCREASE ALL MDAS 60 FEET AND S-LOC 22 VISIBILITY CATS C/D/E 1/8 SM, AND CIRCLING VISIBILITY CATS C/D/E 1/4 SM.

VDP NA WHEN USING MEMPHIS INTL ALTIMETER SETTING.

FOR INOPERATIVE ALS WHEN USING MEMPHIS INTL ALTIMETER SETTING, INCREASE S-ILS 22 CAT E VISIBILITY TO 3/4 SM AND S-LOC 22 CATS C/D/E TO 1 3/8 SM.

PER LETTER FROM SOUTHERN REGION AIRWAY FACILITIES DIVISION, PRECISION INSTRUMENT HOLD LINE NOT PROTECTED WHEN TOWER CLOSED, GS UNUSABLE AT THOSE TIMES, NOTE INCLUDED ON PROCEDURE RESTRICTING GS USE WHEN TOWER CLOSED AND CEILING/VIS LESS THAN 800/2.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT ID</u> NQA	<u>PROCEDURE NAME</u> ILS OR LOC RWY 22	<u>AMDT NO.</u> 7	<u>CITY</u> MILLINGTON	<u>STATE</u> TN	<u>AIRPORT ELEVATION</u> 322	<u>FACILITY</u> I-NQA
--------------------------	--	----------------------	---------------------------	--------------------	---------------------------------	--------------------------

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	3.21
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	0.91
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	218.90
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	400
DISTANCE FROM	THLD	TO 1500FT POINT	4.89
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.27
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	218.90
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	400

THRESHOLD COORDINATES (IF STR-IN)

352154.69N/0895143.22W

ARP COORDINATES

352123.90N/0895213.55W

RUNWAY APCH END AND DIST FURTHEST FROM ARP

RUNWAY 4 DISTANCE 0.66 NM

FAF COORDINATES

352552.87N/0894748.34W

FIX NAME COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.

PART E: PREPARED BY

<u>NAME</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
ERIC N SUSKI (JOSHUA C. JUONI)	AJV-A431	01/12/2024	AERONAUTICAL INFORMATION SPECIALIST

