

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> LAWRENCE MUNI	<u>AIRPORT ID</u> KLWM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> LAWRENCE	<u>STATE</u> MA	
<u>AIRPORT ELEVATION</u> 148	<u>TDZE</u> 144	<u>SUPERSEDED</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 10/12/2017	<u>MAG VAR</u> 15W	<u>EPOCH YEAR</u> 1980
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 15 AUGUST 2019	<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>
BOS VOR/DME		KENEE		TF	FB	1.00	320.74	14.49	2000
WEPSO	IAF	TEWKS	NOPT	TF	FB	1.00	097.97	7.00	2000
SOSYO	IAF	TEWKS	NOPT	TF	FB	1.00	067.46	9.24	2000
KENEE	IAF	TEWKS	NOPT	TF	FB	1.00	008.67	5.00	2000
TEWKS	IF/IAF	WOBMU		TF	FB	1.00	053.08	4.51	1900
WOBMU	FAF	GRAPS/1.70 NM TO RW05		TF	FB	0.30	053.12	3.67	
GRAPS/1.70 NM TO RW05		RW05	MAP	TF	FO	0.30	053.12	1.70	
RW05	MAP	700 MSL		CA			053.12		700
700 MSL		WITCH		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW05

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 3000 DIRECT WITCH AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW TEWKS, LT, 053.08 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 053.12FAF: WOBMUDIST FAF TO MAP: 5.37DIST FAF TO THLD: 5.37

4. MIN ALT: TEWKS 2000, WOBMU 1900, GRAPS/1.70 NM TO RW05 720*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.48GS ANT:

6. MIN GP INCPT: 1900GP ALT AT FAF : WOBMU 1900OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 55.7

8. MSA FROM: RW05 2600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING RWY 32 NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -19°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BOS VOR/DME AIRWAY RADIALS 240 CW 030.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SOSYO ON V431 WESTBOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
*LNAV ONLY
WAAS CHANNEL #53322
REFERENCE PATH ID: W05A
CHART FAS OBST: 356 TOWER 424229N/0710651W.
CHART: 807 TOWER 423914N/0711300W.
HOLD S, LT, 021.00 INBOUND
LTP HAE: 13.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 1100-3

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	344	3/4	200	344	3/4	200	344	3/4	200	344	3/4	200			
LNAV/VNAV DA	604	1 3/8	460	604	1 3/8	460	604	1 3/8	460	604	1 3/8	460			
LNAV MDA	600	1	456	600	1	456	600	1 3/8	456	600	1 3/8	456			
CIRCLING	740	1	592	740	1	592	840	2	692	1220	3	1072			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLWM
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	424238.4815N
LTP/FTP LONGITUDE	0710744.8425W
LTP/FTP ELLIPSOIDAL HEIGHT	+00137
FPAP LATITUDE	424348.5440N
FPAP LONGITUDE	0710630.1315W
THRESHOLD CROSSING HEIGHT (TCH)	00055.7
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)	35.0
CRC REMAINDER	8B3DEB93

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00411
FPAP ORTHOMETRIC HEIGHT	+00411

