

**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</u> LIVERMORE MUNI	<u>AIRPORT ID</u> KLVK	<u>PROCEDURE NAME</u> ILS RWY 25R	<u>ORIGINAL/AMENDMENT</u> 9A	<u>CITY</u> LIVERMORE	<u>STATE</u> CA	
<u>AIRPORT ELEVATION</u> 400	<u>TDZE</u> 400	<u>SUPERSEDED</u> ILS RWY 25R	<u>ORIGINAL/AMENDMENT</u> 9	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 16E	<u>EPOCH YEAR</u> 1980
<u>FACILITY</u> I-LVK	<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>
MOD VOR/DME	IAF	UHHUT/I-LVK 15.52 DME					261.47	26.38	3100
LIN VOR/DME	IAF	UHHUT/I-LVK 15.52 DME					209.19	33.12	3100
UHHUT/I-LVK 15.52 DME	IF	JUSOM/I-LVK 9.30 DME					254.58	6.22 (I-LVK)	3100

MISSED APPROACH

MAP:

ILS: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 5000 ON HEADING 020 AND OAK VOR/DME R-060 TO ALTAM/OAK VOR/DME 23.25 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000.

*MISSED APPROACH REQUIRES A MINIMUM CLIMB OF 358 FT PER NM TO 3600, IF UNABLE TO MEET CLIMB GRADIENT, SEE LOC RWY 25R.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT UHHUT/I-LVK 15.52 DME
3. FAC: 254.58 PFAF: JUSOM/I-LVK 9.30 DME DIST PFAF TO MAP: DIST PFAF TO THLD:
4. MIN ALT: UHHUT/I-LVK 15.52 DME 3100, JUSOM/I-LVK 9.30 DME 3100
5. DIST TO THLD FROM OM: 8.33 MM: IM: 150 HAT: GS ANT: 989
6. MIN GS INCPT: 3100 GS ALT AT PFAF : JUSOM/I-LVK 9.30 DME 3100 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: 20:1: TCH: 47.0
8. MSA FROM: OAK VOR/DME 170-350 3800, 350-170 5100

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.



NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON LIN VOR/DME AIRWAY RADIALS 229 CW 251.

ADDITIONAL FLIGHT DATA:

CHART R-2531

HOLD NE, LT, 240.01 INBOUND

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.

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 25R	600	1/2	200	600	1/2	200	600	1/2	200	600	1/2	200			

CHANGES - REASONS

1. DELETED CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 1700 - REQUESTED BY ATC PER FDC NOTAM 9/0480.

2. DELETED CHART NOTE: DME REQUIRED AND MOVED TO EQUIPMENT REQUIREMENT NOTE SECTION - IAW 8260.19 8-6-8 A; DME IS REQUIRED FOR PROCEDURE.

3. CHANGED CHART NOTE: FROM "PROCEDURE NA FOR ARRIVALS AT LIN VOR/DME ON V108 NORTHEAST BOUND" TO "PROCEDURE NA FOR ARRIVAL ON LIN VOR/DME AIRWAY RADIALS 229 CW 251" - FIX IS OVER A FACILITY; TURNS EXCEED 120 DEGREES.

COORDINATED WITH:A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOA, NORCAL APP CON, LVK ATCT, AMGR**FLIGHT CHECKED BY**PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED**OFFICE**

Digitally signed by

DATE**WARDELL HENNING**

Apr 22, 2020

DEVELOPED BY

WARDELL HENNING (PATRICK COMBS)

Digitally signed by

WARDELL HENNING

Apr 22, 2020

OFFICE

AJV-A432

DATE

04/10/2020

APPROVED BY

GEORGE DAVIS

Digitally signed by

WARDELL HENNING

Apr 22, 2020

OFFICE

AJV-A430

DATE**TITLE**

MANAGER

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

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
LIVERMORE MUNI	KLVK	ILS RWY 25R	9A	LIVERMORE	CA	400	I-LVK

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM
MOD VOR/DME

TO
UHHUT/I-LVK 15.52 DME

<u>RNP</u>	<u>DISTANCE</u> 26.38	<u>PAT</u>	<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>
1.TWR (06-000706)	373909.00N/1212841.00W		1466	500	125	1A	1000				AT634	3100
2.TERRAIN	373733.00N/1212724.00W		1247 (1200)								AS1500	2700

COMPUTATIONS

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

INITIAL

FROM
LIN VOR/DME

TO
UHHUT/I-LVK 15.52 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	33.12										
<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.TWR (06-000706)	373909.00N/1212841.00W	1466	500	125	1A	1000				AT634	3100
3.TERRAIN	373806.00N/1212821.00W	1139 (1100)								AS1500	2600

COMPUTATIONS

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



INTERMEDIATE

FROM

UHHUT/I-LVK 15.52 DME

TO

JUSOM/I-LVK 9.30 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	6.22											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
4.AAO	374021.00N/1213651.00W		2284	164	98	4E	500				AC98	2900
5.TERRAIN	374021.00N/1213651.00W		2084 (2100)								AS1000	3100

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

FINAL: ILS

FROM

JUSOM/I-LVK 9.30 DME

TO

RW25R

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	8.33		DA									
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				600

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



MISSED APPROACH : ILS

FROM

DA

TO

ALTAM/OAK VOR/DME 23.25 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS 435					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
6.AAO	374851.80N/1214830.60W		2799	50	20	2C		ASC				5000
6.AAO	374851.80N/1214830.60W		2799	50	20	2C	1000					3800
7.TERRAIN	374851.80N/1214830.60W		2599 (2600)								AS1500	4100

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

MSA

CENTER

OAK VOR/DME

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
170-350	AAO	375545.00N/1223445.00W	289	20.8	2760	164	98	4E	1000			3800
350-170	AAO	375254.10N/1215451.55W	041	17.4	4079	50	20	2C	1000			5100

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
NORCAL APP CON, LVK TOWER

<u>WX SERVICE</u> ASOS	<u>LOCATION</u> KLVK	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KLVK	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> ASOS	<u>LOCATION</u> KHWD	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KHWD	<u>DISTANCE</u> 14.477	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 83

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KLVK 400, KHWD 31
RA = 83.

<u>PRIMARY NAVAID</u> I-LVK	<u>MONITOR POINT</u> LVK ATCT	<u>HRS OPERATION</u> TOWER OPEN TOWER CLOSED	<u>CAT</u> 1 3
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<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW07R - MIRL	BSC-G	
RW25L - MIRL	BSC-G	
RW	NSTD-G	
RW07L - HIRL (PCL), PAPI-4R	PIR-G	
RW25R - MALSR (PCL), HIRL (PCL), VASI-4L	PIR-G	

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 399.9	<u>TCH</u> 47.0	<u>ELEV GS ANTENNA</u> 393.3	<u>DISTANCE FROM RWY</u> 989	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 48.0
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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	

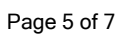
CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:



DUE TO MISSED APPROACH PENETRATIONS AND AIRSPACE CONGESTION REQUIRING A RIGHT TURN AS SOON AS PRACTICAL TO DE-CONFLICT WITH HWD AND OAK OPERATIONS, MINIMUMS WITH A STANDARD MISSED APPROACH CLIMB RATE ARE NOT FEASIBLE. WAIVER REQUESTED TO PUBLISH MINIMUMS WITH CLIMB GRADIENT ONLY.



<u>AIRPORT</u> LIVERMORE MUNI	<u>AIRPORT ID</u> KLVK	<u>PROCEDURE NAME</u> ILS RWY 25R	<u>AMDT NO.</u> 9A	<u>CITY</u> LIVERMORE	<u>STATE</u> CA	<u>AIRPORT ELEVATION</u> 400	<u>FACILITY</u> I-LVK
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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	7.39
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.81
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	270.58
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1800
DISTANCE FROM	THLD	TO 1500FT POINT	14.55
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	8.00
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	270.58
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	2100

THRESHOLD
COORDINATES
(IF STR-IN)

374137.66N/1214840.50W

ARP COORDINATES

374136.20N/1214913.30W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 25R DISTANCE 0.43 NM

FAF
COORDINATES

374132.21N/1213810.76W

FIX NAME
COORDINATES

REMARKS

QUALITY
16
CHECKED

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FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
WARDELL HENNING (PATRICK COMBS)	AJV-A432	04/10/2020	AERONAUTICAL INFORMATION SPECIALIST

