

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) 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 ID</u> KLWS	<u>PROCEDURE NAME</u> RNAV (RNP) Z RWY 12	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> LEWISTON	<u>STATE</u> ID		
<u>AIRPORT ELEVATION</u> 1442	<u>TDZE</u> 1417	<u>SUPERSEDED</u> RNAV (RNP) Z RWY 12	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 06/30/2011	<u>MAG VAR</u> 15E	<u>EPOCH YEAR</u> 2010
<u>FACILITY</u> RNAV	<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>
MQG VOR/DME	IAF	FOWBO		TF	FB	1.00	318.75	13.25	5000
FOWBO		WANEY		RF	FB	1.00	(5.30 NM RADIUS CCW (CFFWX))	5.07	5000
OFINO	IAF	WANEY		TF	FB	1.00	264.57	39.45	5300
WANEY		TIZHO		RF	FB	1.00	(4.70 NM RADIUS CCW (CFTWT))	5.23	5000
TIZHO		HILUR		RF	FB	1.00	(4.00 NM RADIUS CCW (CFTTH))	3.49	5000
PUW VOR/DME	IAF	HILUR		TF	FB	1.00	167.12	8.09	5000
HILUR	IF	JENAS		TF	FB	0.50	150.02	2.66	4400
JENAS		NILDE		RF	FB	0.50	(4.40 NM RADIUS CCW (CFLJN))	3.34	3900
BIDDY	IAF	FOJJO		TF	FB	0.50	112.70	6.46	4300
FOJJO	IF	HOBOP		TF	FB	0.50	106.44	3.33	4300
HOBOP		NILDE		TF	FB	0.50	106.49	2.67	3900
NILDE	PFAF	* ONLAW		TF	FB	0.30	106.53	3.66	
ONLAW		* IYTAM		RF	FB	0.30	(7.00 NM RADIUS CW (CFNQJ))	1.22	
IYTAM		* RW12	MAP	TF	FO	0.30	116.59	2.50	
RW12	MAP	VOSKY		TF	FB	1.00	116.62	4.45	
VOSKY		EVHOG		RF	FB	1.00	(5.50 NM RADIUS CCW (CFTVF))	6.41	
EVHOG		OFINO		TF	FO	1.00	049.82	29.03	6000

QUALITY
24
CHECKED

MISSED APPROACH**MAP:**

RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 6000 ON TRACK 116.62 TO VOSKY THEN LEFT TURN 6000 TO EVHOG AND ON TRACK 049.82 TO OFINO AND HOLD.

*MISSED APPROACH REQUIRES MINIMUM CLIMB OF 260 FEET PER NM TO 3400.

ALTERNATE MISSED APPROACH INSTRUCTIONS:**PROFILE:**

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. PROFILE STARTS AT NILDE					
3. FAC:	*	FAF: NILDE	DIST FAF TO MAP:	DIST FAF TO THLD:	
4. MIN ALT:	NILDE 3900, ONLAW 2659, IYTAM 2254				
5. DIST TO THLD FROM OM:	7.37	MM:	IM:	150 HAT:	268 HAT: 0.77
6. MIN GP INCPT:	3900	GP ALT AT FAF :	3900	OM:	GS ANT:
7. GP ANGLE:	3.10	34:1: IS NOT CLEAR	20:1: IS CLEAR	TCH: 56.0	MM:
8. MSA FROM:	RW12 7700				

PBN REQUIREMENTS NOTE:

RNP AR APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -12°C OR ABOVE 54°C.

CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.

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

CHART PLANVIEW NOTE AT MQG, OFINO, PUW, AND BIDDY: (RNP 0.50).

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON MQG VOR/DME AIRWAY RADIALS 200 CW 247.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT OFINO ON T276 NORTHEAST BOUND.

CHART SPEED ICON IN PLANVIEW AT FOWBO: MAX 210 KIAS.

CHART SPEED ICON IN PLANVIEW AT WANAY: MAX 210 KIAS.

CHART SPEED ICON IN PLANVIEW AT HILUR: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD SW, LT, 058.65 INBOUND.



MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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
AUTHORIZATION REQUIRED															
RNP 0.30 DA*	1685	7/8	268	1685	7/8	268	1685	7/8	268	1685	7/8	268			
RNP 0.30 DA	1889	1 3/8	472	1889	1 3/8	472	1889	1 3/8	472	1889	1 3/8	472			

CHANGES - REASONS

1. INCORPORATED P-NOTAM ORIG-A IN AMENDMENT ORIG-B.
2. TOUCHDOWN ZONE ELEVATION CHANGED FROM 1415 TO 1417 - KLWS AIRNAV UPDATED 9/10/2020.
3. REMOVED PROCEDURE NA AT NIGHT NOTE - NO 20:1 PENETRATIONS EXIST IN EVALUATION.
4. CHANGED UNCOMPENSATED BARO-VNAV NOTE FROM "PROCEDURE NA BELOW -16C (3F) OR ABOVE 36C (98F)" TO "PROCEDURE NA BELOW -12°C OR ABOVE 54°C" - UPDATED 5 YR ACT/IAW 8260.19I 8-6-9R.
5. CHANGED 268 HAT DIST FROM 0.78 TO 0.77 ON PROFILE LINE 5 - TARGETS EVALUATION RESULTS.
6. ADDED 20:1 IS CLEAR TO PROFILE LINE 7 - IAW 8260.19I 8-6-7G(3)(A).
7. ADDED PBN REQUIREMENTS NOTE: RNP AR APCH - GPS - IAW 8260.19I, 8-6-8B(1) AND MEMO ATTACHMENT 5(3).
8. ADDED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - IAW 8260.19I 8-6-9M(1).
9. INCREASED RNP 0.3 DA*/HAT ALL CATS FROM 1683/268 TO 1685/268, RNP 0.3 DA/HAT ALL CATS FROM 1887/472 TO 1889/472 - TDZE INCREASED 2 FEET/CANCELS FDC NOTAM 0/4549.
10. RNP 0.3 DA* ALL CATS VISIBILITY CHANGED FROM 1 SM TO 7/8 SM, RNP 0.3 DA ALL CATS VISIBILITY CHANGED FROM 1 3/4 SM TO 1 3/8 SM - UPDATED VISCHECK IAW 8260.3D TABLE 3-3-1.
11. CHANGED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 6000 VIA TRACK 117 TO VOSKY AND VIA LEFT TURN TO EVHOG AND VIA TRACK 050 TO OFINO AND HOLD" TO "CLIMB TO 6000 ON TRACK 116.62 TO VOSKY THEN LEFT TURN TO EVHOG AND ON TRACK 049.82 TO OFINO AND HOLD" - IAW 8260.19I 8-6-6D(11).
12. ADDED PROCEDURE NA PLANVIEW NOTES AT OFINO AND MQG VDME - IAW 8260.19I 8-2-5E(2).
13. REMOVED ADDITIONAL FLIGHT DATA CHART OBSTACLES 1390 TREE 462259N/1170133W AND 1393 TREE 462301N/1170134W - NEW OBSTACLE EVALUATION, MULTIPLE 34:1 PENETRATIONS LISTED IN VISUAL PORTION OF FINAL ON -9.
14. CHANGED RF CENTER CNF FIX NAMES FROM/TO; CUGEM/CFFWX, RENLE/CFTWT, HEPEL/CFTTH, KEDGY/CFLJN, SAWJE/CFNQJ, CODUT/CFTVF - IAW 8260.19I 2-10-4A(4).

COORDINATED WITH:A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: AMGR, ZSE**FLIGHT CHECKED BY**

SCOTT A THOMPSON

Digitally signed by

DONALD H LANIER

Jul 09, 2021

OFFICE

FICO

DATE

07/07/2021

DEVELOPED BY

DONALD H. LANIER (RICHARD CHRISTENSEN)

Digitally signed by

DONALD H LANIER

Jul 09, 2021

OFFICE

AJV-A431

DATE

12/17/2020

APPROVED BY

LONNIE EVERHART

Digitally signed by

DONALD H LANIER

Jul 09, 2021

OFFICE

AJV-A430

DATETITLE
MANAGERQUALITY
24
CHECKED

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

<u>AIRPORT ID</u> KLWS	<u>PROCEDURE NAME</u> RNAV (RNP) Z RWY 12	<u>AMDT NO.</u> ORIG-B	<u>CITY</u> LEWISTON	<u>STATE</u> ID	<u>AIRPORT ELEVATION</u> 1442	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM MQG VOR/DME TO FOWBO

<u>RNP</u> 1.00	<u>DISTANCE</u> 13.25	<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.TOWER (16-000685)	463056.00N/1165646.00W		3149	50	10	2B	1000				AC10 PR81 AT760	5000
2.TERRAIN	463428.26N/1165842.63W		2919 (2900)								AS1500	4400

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

INITIAL

FROM FOWBO TO WANey

<u>RNP</u> 1.00	<u>DISTANCE</u> 5.07	<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>
3.TOWER (53-000673)	463801.00N/1170517.00W		3500	500	125	5E	1000				AC125 AT375	5000
4.TERRAIN	463801.00N/1170517.00W		3446 (3400)								AS1500	4900

<u>COMPUTATIONS</u>	<u>RF SEGMENT</u> FOWBO-WANEY	<u>ALT</u> 10266	<u>KIAS</u> 210	<u>KTAS</u> 253.12	<u>HAA</u> 8823.8	<u>VKTW</u> 108.42	<u>TR</u> 5.30	<u>BA</u> 19.77	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u> (CFFWX)/5.07 NM
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SEGMENT REMARKS:



FACILITY
RNAV

HMAS

RF CENTER FIX/DISTANCE

HMAS

RF CENTER FIX/DISTANCE
(CFTWT)/5.23 NM

QUALITY
24
CHECKED

INITIAL

FROM
TIZHO

TO
HILUR

<u>RNP</u> 1.00	<u>DISTANCE</u> 3.49	<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>
8.AAO	463326.59N/1171123.04W		3143	50	3	2A	1000				AC3 PR171 AT683	5000
9.TERRAIN	463326.59N/1171123.04W		2943 (2900)								AS1500	4400

COMPUTATIONS													
RF SEGMENT	ALT	KIAS	KTAS	HAA	VKTW	IR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE	
TIZHO-HILUR	6985	210	239.33	5542.6	75.43	4.00	19.88					(CFTTH)/3.49 NM	

SEGMENT REMARKS:

INITIAL

FROM
PUW VOR/DME

TO
HILUR

RNP	DISTANCE	PAT	MAP	HAT	HMAS								
1.00	8.09												
OBSTRUCTION		COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
8.AAO		463326.59N/1171123.04W		3143	50	3	2A	1000				AC3 PR110 DG744	5000
9.TERRAIN		463326.59N/1171123.04W		2943 (2900)								AS1500	4400

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

SEGMENT REMARKS:



INITIAL

FROM

BIDDY

TO

FOJJO

<u>RNP</u> 0.50	<u>DISTANCE</u> 6.46	<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>
10.AAO	463012.76N/1171706.76W		3019	50	20	2C	1000				AC20	4100
11.TERRAIN	463012.11N/1171737.73W		2819 (2800)								AS1500	4300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

HILUR

TO

JENAS

<u>RNP</u> 0.50	<u>DISTANCE</u> 2.66	<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>
12.AAO	463051.03N/1171150.63W		3039	50	20	2C	500				AC20 DG653 VEB188	4400
13.TERRAIN	463051.03N/1171150.63W		2839 (2800)								AS1500	4300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE: STEPDOWN

FROM

JENAS

TO

NILDE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
0.50	3.34											
<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>
14.AAO	462740.02N/1170902.10W		3119	50	20	2C	500				AC20 PR113 VEB12	3800
15.TERRAIN	462803.09N/1170918.40W		2879 (2900)								AS1000	3900

<u>COMPUTATIONS</u>													
<u>RF SEGMENT</u>	<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>IR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>	
JENAS-NILDE	4499	210	230.99	3556.7	55.57	4.40	15.23					(CFLJN)/3.34 NM	

SEGMENT REMARKS:

INTERMEDIATE

FROM

FOJJO

TO

HOBOP

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
0.50	3.33											
<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>
10.AAO	463012.76N/1171706.76W		3019	50	20	2C	500				AC20 PR156 VEB250	4000
16.TERRAIN	463012.76N/1171706.76W		2819 (2800)								AS1500	4300

<u>COMPUTATIONS</u>													
	<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>IR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>	

SEGMENT REMARKS:



INTERMEDIATE: STEPDOWN

FROM

HOBOP

TO

NILDE

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
0.50	2.67											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
14.AAO	462740.02N/1170902.10W		3119	50	20	2C	500				AC20 PR99 VEB12	3800
17.TERRAIN	462803.11N/1170918.45W		2879 (2900)								AS1000	3900

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

FINAL: STEPDOWN

FROM

NILDE

TO

ONLAW

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
0.30	3.66											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				2659

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	IR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
TF TURN FIX NILDE-ONLAW												

SEGMENT REMARKS:



FINAL: STEPDOWN

FROM

ONLAW

TO

IYTAM

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
0.30	1.22											
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT	
							ASC				2254	

COMPUTATIONS	RF SEGMENT	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
	ONLAW-IYTAM	2650	165	173.75	1309.2	50	7.00	5.58			3564.21	20.43:1	(CFNQJ)/1.22 NM

SEGMENT REMARKS:

FINAL: STEPDOWN

FROM

IYTAM

TO

RW12

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
0.30	2.50		RW12	268								
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT	
							ASC			VEB2 MA16	1685	

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

SEGMENT REMARKS:

CG LINE.



FINAL: STEPDOWN

FROM

IYTAM

TO

RW12

<div>RNP</div> <div>0.30</div>	<div>DISTANCE</div> <div>2.50</div>	<div>PAT</div>	<div>MAP</div> <div>RW12</div>	<div>HAT</div> <div>472</div>	<div>HMAS</div>							
<div>OBSTRUCTION</div>	<div>COORDINATES</div>	<div>ELEV MSL</div>	<div>HORZ</div>	<div>VERT</div>	<div>AC</div>	<div>ROC</div>	<div>OCS</div>	<div>CG</div>	<div>CGTA</div>	<div>ADJUSTMENTS</div>	<div>MIN ALT</div>	
							ASC			MA208 XP14	1889	

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

NON-CG LINE. XP14: TO MAINTAIN CURRENT PUBLISHED MINIMA.

MISSED APPROACH

FROM

RW12

TO

VOSKY

<div>RNP</div> <div>0.30*-1.00</div>	<div>DISTANCE</div>	<div>PAT</div>	<div>MAP</div>	<div>HAT</div>	<div>HMAS</div> <div>1385</div>							
<div>OBSTRUCTION</div>	<div>COORDINATES</div>	<div>ELEV MSL</div>	<div>HORZ</div>	<div>VERT</div>	<div>AC</div>	<div>ROC</div>	<div>OCS</div>	<div>CG</div>	<div>CGTA</div>	<div>ADJUSTMENTS</div>	<div>MIN ALT</div>	
18.BUILDING (16-036342)	462207.81N/1170157.51W	1492	250	50	4D		ASC	260	3400	AC50		

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

CG MIN.



MISSED APPROACH

FROM

VOSKY

TO

EVHOG

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 1385				
<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	260	3400		

COMPUTATIONS												
RF SEGMENT	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
VOSKY-EVHOG	6000	265	296.8	4558.2	65.58	5.50	19.2					(CFTVF)

SEGMENT REMARKS:

CG MIN.

MISSED APPROACH

FROM

RW12

TO

VOSKY

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 1569				
<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				

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

SEGMENT REMARKS:

NON-CG MIN.



MISSED APPROACH

FROM

VOSKY

TO

EVHOG

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
0.30-1.00								1569				
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
19.AAO	461706.30N/1165523.03W		2679	50	20	2C		ASC			AC20	

COMPUTATIONS

RF SEGMENT	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
VOSKY-EVHOG	6000	265	296.8	4558.2	65.58	5.50	19.2					(CFTVF)

SEGMENT REMARKS:

NON-CG MIN.

MISSED APPROACH: LEVEL SURFACE

FROM

DA

TO

OFINO

RNP	DISTANCE	PAT	MAP	HAT			HMAS				
0.30-1.00											
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
						ASC					6000
20.AAO	462030.00N/1163754.00W	3914	50	20	2C	1000				AC20 PR290	5300
21.TERRAIN	462030.00N/1163754.00W	3713 (3700)								AS1500	5200

COMPUTATIONS

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

CIRCLING

☐ ALL CATS

☐ CAT A

☐ CAT B

☐ CAT C

☐ CAT D

☐ CAT E

☒ NOT AUTHORIZED



MSA

CENTER

RW12

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	AAO	460715.00N/1173300.00W	220	26.9	6539	164	98	4E	1000		XP62	7700

MSA REMARKS:

XP62: TO MAINTAIN CURRENT PUBLISHED MSA.

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

<u>WX SERVICE</u> ASOS	<u>LOCATION</u> KLWS	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KLWS	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> ASOS	<u>LOCATION</u> KPUW	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KPUW	<u>DISTANCE</u> 22.51	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0

WX REMARKS:

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW08 - HIRL, REIL (PCL), VASI-4L		NPI-G	
RW12 - MIRL, REIL, PAPI-2L (PCL)		NPI-G	
RW30 - MIRL, PAPI-2L (PCL)		NPI-G	
RW26 - MALSR (PCL), HIRL, PAPI-4L		PIR-G	

<u>GLIDESLOPE ANGLE</u> 3.10	<u>ELEV RWY THRESHOLD</u> 1370.2	<u>TCH</u> 56.0	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 40.0
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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> -12C	<u>CRITICAL HIGH</u> +54C	<u>ACT</u> -12C	<u>APT ISA</u> +12.14C
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CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2015-2019).
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 1026 HIGH TEMP 1285.



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	0.3 DA* AND 0.3 DA	
34:1		
1407 TREE (16-030080) 462258.52N/1170137.74W (14.55)		1406 TREE (16-030021) 462302.12N/1170134.70W (11.12)
1407 TREE (16-053045) 462302.70N/1170134.83W (10.77)		1401 TREE (16-030020) 462301.79N/1170134.70W (6.77)
1391 TREE (16-030018) 462300.42N/1170130.42W (6.08)		1402 TREE (16-053012) 462303.09N/1170134.57W (5.4)
1396 TREE (16-030019) 462300.93N/1170133.99W (4.57)		1389 TREE (16-035979) 462258.86N/1170132.74W (3.59)
1387 TREE (16-030017) 462300.23N/1170130.14W (2.89)		

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.

RNP 0.50 REQUIRED TO MITIGATE TERRAIN/CONTROLLED AIRSPACE REQUIREMENT AND TO ACCOMMODATE MINIMUM SEGMENT LENGTH REQUIREMENTS.

3.1 DEGREE GLIDESLOPE AND 56.0' TCH UTILIZED TO ELIMINATE GQS PENETRATIONS.

100 FEET VEGITATION APPLIED IN EVALUATION.

EVAUATED WITH CURRENT AUTOMATION PROGRAM-TARGETS, ORIG PROCEDURE EVALUATED WITH IPDS. MINOR DIFFERENCES IN CRITERIA/PROGRAM TOLERANCES CAUSING TANGENCY AND LEG LENGTH ISSUES EVALUATING WITH CURRENT PROGRAM. BUILT ORIG-B FINAL AND MISSED OEA TO VERIFY PERIODIC REVIEW OF NEW MISSED APPROACH CLIMB GRADIENT OBSTACLES CAUSING NOTAM 0/4549 TO NA PROCEDURE;

- 1502 BUILDING (16-049056) 462208.44N/1170155.38W (4D) -- OBST RESURVEYED ON 8/12/2020 CHANGED ACCURACY CODE FROM 4D TO 1A. OBST NO LONGER FACTOR WITH CURRENT PUBLISHED MISSED APPROACH CLIMB GRADIENT.

- 1492 BUILDING (16-0363421) 462207.81N/1170157.51W (4D) -- AIRNAV UPDATED TOUCHDOWN ZONE ELEVATION FROM 1415 TO 1417 ON 9/10/2020, RAISING DA 2 FEET, AND UPDATED 5 YEAR ACT ON ORIG-B AMENDMENT MITIGATED 1492 BUILDING REQUIRING NO INCREASE IN CLIMB GRADIENT FOR 0.3 DA*.



<div>AIRPORT ID</div> <div>KLWS</div>	<div>PROCEDURE NAME</div> <div>RNAV (RNP) Z RWY 12</div>	<div>AMDT NO.</div> <div>ORIG-B</div>	<div>CITY</div> <div>LEWISTON</div>	<div>STATE</div> <div>ID</div>	<div>AIRPORT ELEVATION</div> <div>1442</div>	<div>FACILITY</div> <div>RNAV</div>
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	3.93			
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20			
TRUE COURSE OF	FINAL*	SEGMENT CONTAINING 1000FT POINT	*			
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	2700			
DISTANCE FROM	THLD	TO 1500FT POINT	10.04			
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	2.00			
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	121.49			
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	2900			
THRESHOLD COORDINATES (IF STR-IN)	462254.44N/1170124.73W					
ARP COORDINATES	462228.19N/1170055.43W					
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 26 DISTANCE 0.59 NM					
FAF COORDINATES	462712.19N/1171001.58W					
FIX NAME COORDINATES						
REMARKS						
NO ADDITIONAL AIRSPACE REQUIRED						
*FINAL CONTAINS RF SEGMENT (IF FOJJO)						

QUALITY
24
CHECKED

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PART E: PREPARED BY

<u>NAME</u> DONALD H. LANIER (RICHARD CHRISTENSEN)	<u>OFFICE</u> AJV-A431	<u>DATE</u> 12/17/2020	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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