FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS SERVICE LOC BC STANDARD INSTRUMENT APPROACH PROCEDURE

TITLE 14 CFR PART 97.25

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.

AIRPORT AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT STATE CITY WATERLOO RGNL **KALO** LOC BC RWY 30 12 **WATERLOO** IΑ

AIRPORT ELEVATION EPOCH YEAR TDZE SUPERSEDED ORIGINAL/AMENDMENT DATED **MAG VAR** LOC BC RWY 30 873 11B 07/21/2016 0E 2020 868

FACILITY COORDINATES OF FACILITIES ACTUAL EFFECTIVE DATE REQUIRED EFFECTIVE DATE **CANCEL/SUSPEND** I-ALO ROUTINE

13 SEPTEMBER 2018

TERMINAL ROUTES

FROM	FIX TYPE	<u>TO</u>	FIX TYPE	LEG TYPE	FO/FB	RNP	<u>COURSE</u>	DISTANCE	ALTITUDE
ALO VOR/DME		KUCTE/I-ALO 11.07 DME/RADAR					127.31	11.98	3400
CID VOR/DME	IAF	KUCTE/I-ALO 11.07 DME/RADAR	NOPT				326.69	37.36	3400
KUCTE/I-ALO 11.07 DME/RADAR	IF/IAF	IVOCE/I-ALO 4.63 DME/RADAR					307.80	6.44 (I-ALO)	2500

MISSED APPROACH

MAP:

LOC: 4.13 NM AFTER IVOCE/I-ALO 4.63 DME/RADAR OR AT WOLOP/0.50 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 ON ALO VOR/DME R-308 TO SEATS INT/ALO 13.32 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE **OUTBOUND FT WITHIN** MILES OF (IAF)

2. HOLD SE KUCTE, RT, 307.80 INBOUND, 3400 FT. IN LIEU OF PT (IAF), MAX 5000.

3. FAC: 307.80 FAF: IVOCE/I-ALO 4.63 **DIST FAF TO MAP: 4.13 DIST FAF TO THLD: 4.96**

DME/RADAR

4. MIN ALT: KUCTE/I-ALO 11.07 DME/RADAR 3400, IVOCE/I-ALO 4.63 DME/RADAR 2500, JEGIM/I-ALO 1.57 DME 1520

8. MSA FROM: ALO VOR/DME 360-090 3200, 090-180 4000, 180-360 2600

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART PROFILE NOTE: DISREGARD GS INDICATIONS.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ALO VOR/DME AIRWAY RADIALS 090 CW 140. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON CID VOR/DME AIRWAY RADIALS 321 CW 338.

CHART PROFILE NOTE: USE I-ALO DME WHEN ON THE LOCALIZER COURSE.



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WATERLOO RGNL KALO LOC BC RWY 30 12 WATERLOO IA

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON. IVOCE TO RW30: 3.00/52.

CHART IN PROFILE VIEW: I-ALO DME ANTENNA. CHART FAS OBST: 985 TREE 423153N/0922125W.

HOLD NW, LT, 128.46 INBOUND

MINIMUMS:

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

ALTERNATE: NA LOC: STANDARD - CAT D 800-2 1/4, NA WHEN CONTROL TOWER CLOSED

CATEGORY:	A		В		С			D			E				
FINAL TYPE	DA/MDA	<u>VIS</u>	HAT/HAA												
S-LOC 30	1240	3/4	372	1240	3/4	372	1240	3/4	372	1240	3/4	372			
CIRCLING	1360	1	487	1400	1	527	1480	1 3/4	607	1600	2 1/4	727			

CHANGES - REASONS

- 1. UPDATED S-LOC 30 MDA/HAT FROM 1320/452 TO 1240-372 ADDED STEPDOWN FIX.
- 2. UPDATED S-LOC 30 VIS CAT C FROM 1 1/4 TO 3/4 CAT D FROM 1 1/2 TO 3/4 VIS CK CALCULATION
- 3. UPDATED CIRCLING MDA/HAS CAT A FROM 1420/547 TO 1360/487 CAT B FROM 1420/547 TO 1400/527 CAT C FROM 1420/547 TO 1480/607 CAT D FROM 1480/607 TO 1600/727 OBSTACLE EVALUATION WITH NEW CIRCLING RADIUS.
- 4. UPDATED CIRCLING VISIBILITY CAT C FROM 1 1/2 TO 1 3/4 CAT D FROM 2 TO 2 1-4 VIS CK CALCULATION.
- 5. ADDED PROCEDURE NA NOTE FOR ARRIVALS AT ALO VOR/DME RADIALS 090 CW 140 TURN EXCEEDS 120 DEGREES.
- 6. ADDED EQUIPMENT REQUIREMENTS NOTE: DME REQUIRED IAW 8260.19H 8-6-8, REQUIRED TO FLY PROCEDURE.
- 7. REMOVED CHART PLANVIEW NOTE: DME OR RADAR REQUIRED NO LONGER REQUIRED.
- 8. UPDATED PROCEDURE MAG VAR FROM 3E TO 0E AIRPORT/FACILITY MAG VAR UPDATE.
- 9. UPDATED FINAL COURSE FROM 304.79 TO 307.80 RECALCULATED WITH UPDATED MAG VAR AND RUNWAY BEARING.
- 10. UPDATED HOLD IN LIEU INBOUND COURSE FROM 304.79 TO 307.80 RECALCULATED WITH UPDATED MAG VAR AND RUNWAY BEARING.
- 11. UPDATED ALT MIN FROM @ NA WHEN LOCAL WX NOT AVAILABLE TO STANDARD @ CAT D 800-2 1 /4 SECONDARY ALT SOURCE SUPPORTS ALT MINS.
- 12. UPDATED FAS OBS FROM 960 TOWER TO 985 TREE NEW CONTROLLING OBS.
- 13. UPDATED MISSED HOLD INBOUND FROM 122.46 TO 128.46 UPDATED MAG VAR
- 14. UPDATED MISSED INSTRUCTIONS FROM CLIMB TO 3500 ON ALO VOR/DME R-302 TO SEATS INT/ALO 13.32
- DME AND HOLD TO CLIMB TO 3500 ON ALO VOR/DME R-308 TO SEATS INT/ALO 13.32 DME AND HOLD MAG VAR UPDATED.
- 15. UPDATED TERM ROUTES FROM ALO VOR/DME COURSE FROM 1212.31 TO 127.31 FAC MAG VAR UPDATED.
- 16. UPDATED TERM ROUTES FROM KUCTE COURSE/DISTANCE FROM 304.79/6.50 TO 307.80/6.44 RECALCULATED WITH UPDATED MAG VAR, RUNWAY BEARING AND UPDATED FAF LOCATION.
- 17. UPDATED FAF FROM IVOCE/I-ALO 4.57 DME/RADAR TO IVOCE/I-ALO 4.63 DME/RADAR OPTIMUM FAF LOCATION.
- 18. ADDED STEPDOWN JEGIM/I-ALO 1.57 DME LOWER MINIMUMS.
- 19. ADDED NAMED MAP FIX; WOLOP//I-ALO .50 DME IAW .19H CH 2
- 20. UPDATED DIST FROM FAF TO MAP/THLD FROM 4.07/4.90 TO 4.13/4.96 UPDATED FAF LOCATION.

COORDINATED WITH:

