

**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> KAOO	<u>PROCEDURE NAME</u> ILS OR LOC RWY 21	<u>ORIGINAL/AMENDMENT</u> 9	<u>CITY</u> ALTOONA	<u>STATE</u> PA	
<u>AIRPORT ELEVATION</u> 1503	<u>TDZE</u> 1486	<u>SUPERSEDED</u> ILS OR LOC RWY 21	<u>ORIGINAL/AMENDMENT</u> 8C	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 10W
<u>FACILITY</u> I-AOO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 30 NOVEMBER 2023	<u>REQUIRED EFFECTIVE DATE</u> 11/30/2023	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2005

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
HUDON	IAF	KEWER INT	NOPT				254.00	10.22 (JST R-074)	4300
KEWER INT	IF/IAF	ALTOO OM					205.98	6.05 (I-AOO)	3500

**MISSED APPROACH**

**MAP:**

ILS: DA  
LOC: 6.04 NM AFTER ALTOO OM

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2100 THEN CLIMBING RIGHT TURN TO 5000 ON HEADING 295 AND ON JST R-096 TO ZOTBI/JST 11.70 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

1. PT            SIDE OF COURSE            OUTBOUND            FT WITHIN            MILES OF            (IAF)
2. HOLD NE KEWER, RT, 205.98 INBOUND, 4300 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 205.98                            FAF: ALTOO OM                            DIST FAF TO MAP: 6.04                            DIST FAF TO THLD: 6.04
4. MIN ALT: KEWER INT 4300, ALTOO OM 3500
5. DIST TO THLD FROM OM: 6.04            MM:            IM:            150 HAT:            GS ANT: 998
6. MIN GS INCPT: 3500                            GS ALT AT PFAF: ALTOO OM 3444                            OM: 3444                            MM:            IM:
7. GS ANGLE: 3.00                            34:1:                            20:1:                            TCH: 52.0
8. MSA FROM: ARP KAOO 4400

**EQUIPMENT REQUIREMENTS NOTE:**

DME REQUIRED.



**NOTES:**

CHART NOTE: CIRCLING NA TO RWYS 12 AND 30.  
 CHART NOTE: CIRCLING NA FOR CATS C, D NW OF RWYS 12 AND 21.  
 CHART NOTE: FOR INOPERATIVE ALS INCREASE S-LOC 21 VISIBILITY CATS C AND D TO 2 SM.

**ADDITIONAL FLIGHT DATA:**

CHART CIRCLING ICON  
 HOLD E, RT, 276.04 INBOUND.  
 FAS OBST: 1943 AAO 402315N/0781821W.  
 2205 AAO 402412N/0781803W.

**MINIMUMS:**

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

**ALTERNATE:** NA  ILS: STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.; LOC: STANDARD - CAT C 1300-3, CAT D 1400-3, 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 21	1686	1/2	200	1686	1/2	200	1686	1/2	200	1686	1/2	200				
S-LOC 21	2240	1/2	754	2240	3/4	754	2240	1 3/4	754	2240	1 3/4	754				
CIRCLING	2240	1	737	2240	1 1/4	737	2800	3	1297	2840	3	1337				

**CHANGES - REASONS**

1. MISSED APPROACH INSTRUCTIONS: CHANGED FROM "CLIMB TO 2100, THEN CLIMBING RIGHT TURN TO 5000 ON HEADING 295 AND JST R-096 TO ZOTBI INT/JST 11.70 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000." TO "CLIMB TO 2100 THEN CLIMBING RIGHT TURN TO 5000 ON HEADING 295 AND ON JST R-096 TO ZOTBI/JST 11.70 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 5000." - ZOTBI NO LONGER AN INT.
2. REMOVED ALTERNATE MISSED APPROACH - FPT REQUEST, REC VORMON
3. PROFILE LINE 6: CHANGED GS ALT AT PFAF: FROM "ALTOO OM 3473" TO "ALTOO OM 3444"; OM FROM "3478" TO "3444" - NEW TARGETS EVALUATION.
4. NOTES: ADDED "DME REQUIRED" TO EQUIPMENT REQUIREMENTS NOTE - REC VORMON
5. NOTES: CHANGED FROM "CHART NOTE: CIRCLING TO RWY 3, 12, 30 NA AT NIGHT." TO "CIRCLING NA TO RWYS 12 AND 30" - STANDARDIZED CIRCLING RESTRICTIONS BETWEEN PROCEDURES AND RESTRICTIONS REMOVED FROM RWY 3.
6. CHART NOTE: CHANGED FROM "FOR INOPERATIVE ALS INCREASE S-LOC 21 VISIBILITY CATS C AND D TO 2 1/2 MILES." TO "CHART NOTE: FOR INOPERATIVE ALS INCREASE S-LOC 21 VISIBILITY CATS C AND D TO 2 SM." - 8260.3E TABLE 3-3-1
7. ADDITIONAL FLIGHT DATA: CHANGED 7:1 FROM "2139 AAO 402439N/0781745W." TO "2205 AAO 402412N/0781803W." - NEW TARGETS EVALUATION
8. ADDED "MAX 6000" TO PROFILE LINE 2 -- UPDATED 8260.19I, 8-6-7.B(2).
9. ADDITIONAL FLIGHT DATA CHANGED FROM "FAS OBST: 2199 AAO 402347N/0781817W." TO "FAS OBST: 1943 AAO 402315N/0781821W." - 7:1 TAKEN RESULTING IN NEW CONTROLLER.
10. ADDITIONAL FLIGHT DATA: CHANGED FROM "HOLD W, RT, 096.04 INBOUND." TO "HOLD E, RT, 276.04 INBOUND." - HOLDING ENTERED THE NO COURSE SIGNAL ZONE OF JST.



**COORDINATED WITH:**

**A4A**    **ALPA**    **AOPA**    **APA**    **HAI**    **NBAA**    **OTHER:** ZOB, JOHNSTOWN APP CON, AMGR

**FLIGHT CHECKED BY**  
PENDING

*Digitally signed by*  
**ERIC N SUSKI**  
Sep 19, 2023

**OFFICE**

**DATE**

**DEVELOPED BY**  
ERIC N SUSKI (COLE NESBITT)

*Digitally signed by*  
**ERIC N SUSKI**  
Sep 19, 2023

**OFFICE**  
AJV-A431

**DATE**  
07/03/2023

**APPROVED BY**  
ERIC N SUSKI

*Digitally signed by*  
**ERIC N SUSKI**  
Sep 19, 2023

**OFFICE**  
AJV-A430

**DATE**

**TITLE**  
MANAGER

