# 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.

| AIRPORT ELEVATION         TDZE<br>633         SUPERSEDED<br>LIS RWY 20 (CAT II)<br>LIS RWY 20 (CAT II)         ORIGINAL/AMENOMENI<br>3C         DATED<br>01/03/2019         MAQ VAR<br>EPO<br>3W         EPO<br>3C           EACILITY<br>LOHA         COORDINATES OF FACILITIES         ACTUAL EFFECTIVE DATE<br>15 JUNE 2023         ORIGINAL/AMENOMENI<br>3C         CANCEL/SUSPEND         CANCEL/SUSPEND           TERMINAL ROUTES         EROM         EXTYPE         TO         EXTYPE         FOFB         RNP         COURSE         DISTANCE         AL           DUBBS INT         CON NDB         IF/IAF         HIXON OM/RADAR         I         I         20.57.14         20.87 (CON BRG-075)         I           CON NDB         IF/IAF         HIXON OM/RADAR         I         I         20.17.1         3.62 (I-CHA)         I           MISSED APPROACH<br>MARCE<br>ILS: DA<br>LIS: DA<br>LI | AIRPORT ID<br>KCHA    | PROCEDURE NAME<br>ILS OR LOC RWY 20 |                      | OR                     | ORIGINAL/AMENDMENT<br>37 |       |                | <u>CITY</u><br>CHATTANOOGA |          | STATE<br>TN         |                          |  |
|--|-----------------------|-------------------------------------|----------------------|------------------------|--------------------------|-------|----------------|----------------------------|----------|---------------------|--------------------------|--|
| EACILITY<br>ICHA         COORDINATES OF FACILITIES         ACTUAL EFFECTIVE DATE<br>IS JUNE 2023         REQUIRED EFFECTIVE DATE<br>06/15/2023         CANCEL/SUSPEND           TERMINAL ROUTES         EXTYPE         TO         EXTYPE         LEG TYPE         EO/EB         RNP         COURSE         DISTANCE         AL           EROM         EXTYPE         TO         EXTYPE         LEG TYPE         EO/EB         RNP         COURSE         DISTANCE         AL           DUBBS INT         CON NDB         IF/LAF         HIXON OM/RADAR         I         20.37 (CON BRG-075)         I           GON NDB         IF/LAF         HIXON OM/RADAR         I         I         20.171         3.62 (I-CHA)         I           MISSED APPROACH         INSED APPROACH INSTRUCTIONS:         I         I         20.171         3.62 (I-CHA)         I           LINE TO ADD APPROACH INSTRUCTIONS:         ISO AD APPROACH INSTRUCTIONS:         I   |                       |                                     |                      | ILS OR LOC RW          | Y 20                     |       | <u>ORIGINA</u> |                            |          |                     | EPOCH YEA<br>2020        |  |
| FROM         FIX TYPE         TO         FIX TYPE         LEG TYPE         FO/E         RNP         COURSE         DISTANCE         AL           DUBBS INT         I         CQN NDB         ICQN NDB         ICQN NDB         20.87 (CQN BRG-075)         ICQN NDB         20.87 (CQN BRG-075)         ICQN NDB         ICDN DB         20.87 (CQN BRG-075)         ICQN NDB         ICDN DB         ICDN ID         ICDN FEAD ACH INSTRUCTIONS:         ICDN DB  |                       |                                     |                      | EFFECTIVE DATE         | FECTIVE DATE REQU        |       |                |                            | CANCEL/S | CANCEL/SUSPEND      |                          |  |
| DUBBS INT         CQN NDB         IF/IAF         IIXON OM/RADAR         255.14         20.87 (CQN BRG-075)           CQN NDB         IF/IAF         HIXON OM/RADAR         201.71         3.62 (I-CHA)         3           MISSED APPROACH         MAP:         IIXIN AFTER HIXON OM/RADAR         3         3         62 (I-CHA)         5         62 (I-CHA)         5         5         5         5         62 (I-CHA)         5         62 (I-CHA)         5         5         5         5         7         5         6         7         5         5         7         5         7         5         7         5         7         5         7 <t< td=""><td>TERMINAL ROUTES</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>   | TERMINAL ROUTES       |                                     |                      |                        |                          |       |                |                            |          |                     |                          |  |
| CQN NDB       IF/IAF       HIXON OM/RADAR       201.71       3.62 (I-CHA)         MISSED APPROACH<br>MAP:<br>ILIS: DA<br>LOC: 4.13 MM AFTER HIXON OM/RADAR       S.62 (I-CHA)       S.62 (I-CHA)       S.62 (I-CHA)         MISSED APPROACH<br>MISSED APPROACH INSTRUCTIONS:<br>CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3700 DIRECT CQN NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3700.       S.41       S.62 (I-CHA)       S.62 (I-CHA)         ALTERNATE MISSED APPROACH INSTRUCTIONS:<br>CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3700 DIRECT CQN NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3700.       S.700       S.7000       S.700   | FROM                  | FIX TYPE                            | <u>T0</u>            | FIX TYPE               | LEG TYPE                 | FO/FB | <u>RNP</u>     | COURSE                     | <u>.</u> | DISTANCE            | ALTITUDE                 |  |
| MISSED APPROACH<br>MAP:<br>LIS: DA<br>LOC: 4.13 NM AFTER HIXON OM/RADAR<br>MISSED APPROACH INSTRUCTIONS:<br>CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3700 DIRECT CQN NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3700.<br>ALTERNATE MISSED APPROACH INSTRUCTIONS:<br>PROFILE:<br>1. PT R SIDE OF COURSE 021.71 OUTBOUND 3000 FT WITHIN 10 MILES OF CQN NDB (IAF)<br>2.<br>3. FAC: 201.71 FAF: HIXON OM/RADAR DIST FAF TO MAP: 4.13 DIST FAF TO THLD: 4.13<br>4. MIN ALT: CQN NDB 3000, HIXON OM/RADAR 2100<br>5. DIST TO THLD FROM OM: 4.13 MM: IM: 100 HAT: 954.00 150 HAT: GS ANT: 1104<br>6. MIN GS INCPT: 2500 GS ALT AT PFAF: (CFDTJ) 2500 OM: 2039 MM: IM:<br>7. GS ANGLE: 3.00 34:1: 20:1: TCH: 56.2<br>8. MSA FROM: CQN NDB 3300<br>EQUIPRED.  | DUBBS INT             |                                     | CQN NDB              |                        |                          |       |                | 255.14                     |          | 20.87 (CQN BRG-075) | 3900                     |  |
| MAP:<br>ILS: DA<br>LOC: 4.13 MI AFTER HIXON OM/RADAR<br>MISSED APPROACH INSTRUCTIONS:<br>CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3700 DIRECT CQN NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3700.<br>ALTERNATE MISSED APPROACH INSTRUCTIONS:<br>PROFILE:<br>1. PT R SIDE OF COURSE 021.71 OUTBOUND 3000 FT WITHIN 10 MILES OF CQN NDB (IAF)<br>2.<br>3. FAC: 201.71 FAF: HIXON OM/RADAR DIST FAF TO MAP: 4.13 DIST FAF TO THLD: 4.13<br>4. MIN ALT: CQN NDB 3000, HIXON OM/RADAR 2100<br>5. DIST TO THLD FROM OM: 4.13 MM: IM: 100 HAT: 954.00 150 HAT: GS ANT: 1104<br>6. MIN GS INCPT: 2500 GS ALT AT PFAF: (CFDTJ) 2500 OM: 2039 MM: IM:<br>7. GS ANGLE: 3.00 34:1: 20:1: TCH: 56.2<br>8. MSA FROM: CQN NDB 3800  | CQN NDB               | IF/IAF                              | HIXON OM/RADAR       | {                      |                          |       |                | 201.71                     |          | 3.62 (I-CHA)        | 2100                     |  |
| 3. FAC: 201.71       FAF: HIXON OM/RADAR       DIST FAF TO MAP: 4.13       DIST FAF TO THLD: 4.13         4. MIN ALT:       CQN NDB 3000, HIXON OM/RADAR 2100       5. DIST TO THLD FROM OM: 4.13       MM:       IM:       100 HAT: 954.00       150 HAT:       GS ANT: 1104         5. DIST TO THLD FROM OM:       4.13       MM:       IM:       100 HAT: 954.00       150 HAT:       GS ANT: 1104         6. MIN GS INCPT:       2500       GS ALT AT PFAF :       (CFDTJ) 2500       OM: 2039       MM:       IM:         7. GS ANGLE:       3.00       34:1:       20:1:       TCH: 56.2       EQUIPMENT REQUIREMENTS NOTE:       EQUIPMENT REQUIREMENTS NOTE:       CQN NDB 3800   |                       | JRSE 021.71                         | OUTBOUND 3000        | FT WITHIN              | 10 <b>MIL</b>            | ES OF | CQN N          | IDB (IAF)                  |          |                     |                          |  |
| 4. MIN ALT:       CQN NDB 3000, HIXON OM/RADAR 2100         5. DIST TO THLD FROM OM:       4.13       MM:       IM:       100 HAT:       954.00       150 HAT:       GS ANT:       1104         6. MIN GS INCPT:       2500       GS ALT AT PFAF:       (CFDTJ) 2500       OM:       2039       MM:       IM:         7. GS ANGLE:       3.00       34:1:       20:1:       TCH:       56.2         8. MSA FROM:       CQN NDB 3800       EQUIPMENT REQUIREMENTS NOTE:       CAN NDB 3800       CAN NDB 3800       CAN NDB 3800  |                       |                                     |                      |                        |                          |       | _              |                            | _        |                     |                          |  |
| 5. DIST TO THLD FROM OM: 4.13       MM:       IM: 100 HAT: 954.00       150 HAT: GS ANT: 1104         6. MIN GS INCPT: 2500       GS ALT AT PFAF: (CFDTJ) 2500       OM: 2039       MM:       IM:         7. GS ANGLE: 3.00       34:1:       20:1:       TCH: 56.2       IM:       IM:         EQUIPMENT REQUIREMENTS NOTE:   |                       |                                     |                      | DIST FAF               | FO MAP: 4.13             |       | D              | IST FAF TO THLD: 4.1       | 3        |                     |                          |  |
| 7. GS ANGLE: 3.00       34:1:       20:1:       TCH: 56.2         8. MSA FROM:       CQN NDB 3800         EQUIPMENT REQUIREMENTS NOTE:         ADE REQUIRED.   |                       |                                     |                      | <b>100 HAT:</b> 954.00 | 150 HAT:                 |       | GS ANT:        | 1104                       |          |                     |                          |  |
| 8. MSA FROM: CQN NDB 3800 EQUIPMENT REQUIREMENTS NOTE: ADE REQUIRED.   | 6. MIN GS INCPT: 2500 | GS ALT A                            | T PFAF: (CFDTJ) 2500 |                        | <b>OM:</b> 203           | 9     |                | MM:                        |          | IM:                 |                          |  |
| EQUIPMENT REQUIREMENTS NOTE:   |                       |                                     | 20:1:                | TCH:                   | 56.2                     |       |                |                            |          |                     |                          |  |
| EQUIPMENT REQUIREMENTS NOTE:<br>ADF REQUIRED.  | 8. MSA FROM: CQN NDE  | 3 3800                              |                      |                        |                          |       |                |                            |          |                     | OVALITY                  |  |
|  |                       | <u>IS NOTE:</u>                     |                      |                        |                          |       |                |                            |          |                     | 35<br><sup>C</sup> HECKÉ |  |

| AIRPORT ID | PROCEDURE NAME      | ORIGINAL/AMENDMENT | <u>CITY</u> | <u>STATE</u> |  |
|------------|---------------------|--------------------|-------------|--------------|--|
| KCHA       | ILS OR LOC RWY 20   | 37                 | CHATTANOOGA | TN           |  |
|            | ILS RWY 20 (CAT II) |                    |             |              |  |

### NOTES:

CAT II CHART NOTE: SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 20: CAT A, B, C, D, RA 103, RVR 1200, HAT 100, DA 773 MSL. CAT II CHART NOTE: PROCEDURE NA WHEN TOWER CLOSED. CHART NOTE: DISREGARD INNER MARKER INDICATION. CAT I CHART NOTE: CIRCLING TO RWY 15, 33 NA AT NIGHT.

### ADDITIONAL FLIGHT DATA:

CHART AT OR BELOW 6000 AT CQN NDB. HOLD N, LT, 199.00 INBOUND. FAS OBST: 1060 AAO 350549N/0851033W. CHART CIRCLING ICON. CHART IN PLANVIEW: (CFDTJ) AT 350753N/0851004W.

## MINIMUMS:

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

ALTERNATE: NA IILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT C 900-2 1/2, CAT D 900-3, NA WHEN CONTROL TOWER CLOSED.

| CATEGORY:  |        | Α    |         |        | В    |         |        | С     |         |        | 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 20   | 873    | 1800 | 200     | 873    | 1800 | 200     | 873    | 1800  | 200     | 873    | 1800  | 200     |        |     |         |
| S-LOC 20   | 1320   | 2400 | 647     | 1320   | 2400 | 647     | 1320   | 1 3/8 | 647     | 1320   | 1 3/8 | 647     |        |     |         |
| CIRCLING   | 1320   | 1    | 637     | 1340   | 1    | 657     | 1500   | 2 1/2 | 817     | 1580   | 3     | 897     |        |     |         |

OVALIT\_ 35 CHECKE

| AIRPORT ID | PROCEDURE NAME      | ORIGINAL/AMENDMENT | <u>CITY</u> | <u>STATE</u> |  |
|------------|---------------------|--------------------|-------------|--------------|--|
| KCHA       | ILS OR LOC RWY 20   | 37                 | CHATTANOOGA | TN           |  |
|            | ILS RWY 20 (CAT II) |                    |             |              |  |

#### **CHANGES - REASONS**

1. TERMINAL ROUTES: REMOVED COMAR, PALER, BOOPS, CRAND AND GQO VORTAC FEEDERS - PER IFP/ATC CHECKLIST REQUEST, GQO VOR MON NATL PROGRAM.

2. TERMINAL ROUTES: ADDED "INT" TO DUBBS, "CHANGED DUBBS TO CQN NDB/RADAR SEGMENT DISTANCE FROM 20.87 TO "20.87 (CQN BRG-075)" AND ALTITUDE FROM 3300 TO 3900 - ACCORDING TO CURRENT CRITERIA. ALTITUDE BASED ON NEW CONTROLLING OBSTACLE.

3. TERMINAL ROUTES: REMOVED "\*" FROM "2100\*" FOR CQN NDB/RADAR TO HIXON OM/RADAR SEGMENT - NO LONGER REQUIRED BY CRITERIA.

4. MISSED APPROACH INSTRUCTIONS: CHANGED FROM "CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3100 DIRECT GQO VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3100" TO "CLIMB TO

1300 THEN CLIMBING LEFT TURN TO 3700 DIRECT CQN NDB AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3700" - PER IFP/ATC CHECKLIST REQUEST, GQO VOR MON NATL PROGRAM.

5. REMOVED ALTERNATE MISSED APPROACH INSTRUCTIONS - PER IFP/ATC CHECKLIST REQUEST.

6. PROFILE LINE 4: REMOVED "\*" FROM "CQN NDB/RADAR 3000, HIXON OM/RADAR 2100\*" - NO LONGER REQUIRED BY CRITERIA.

7. PROFILE LINE 5: REMOVED "MM: 0.49"- NO LONGER APPLICABLE.

8. PROFILE LINE 6: CHANGED OM FROM 2055 TO 2039 - UPDATED VALUE BASED ON PROCEDURE EVALUATION.

9. PROFILE LINE 7: REMOVED 20:1 IS CLEAR AND 34:1 IS CLEAR - NOT APPLICABLE ON CONVENTIONAL PROCEDURES.

10. EQUIPMENT REQUIREMENTS NOTES: CHANGED FROM "ADF OR RADAR REQUIRED FOR PROCEDURE ENTRY" TO "ADF REQUIRED" - 8260.19I, PARA 8-6-8A(5).

11. REMOVED "\*LOC ONLY" FROM NOTES - NO LONGER REQUIRED BY CURRENT CRITERIA.

12. CHANGED "CHART NOTE: WHEN CONTROL TOWER CLSD, CAT II ILS NA" TO "CAT II CHART NOTE: PROCEDURE NA WHEN TOWER CLOSED" - PER 8260.19I, PARA 8-6-11M(6).

13. REMOVED "CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 20 CAT A/B RVR TO 5500 AND CAT C/D VISIBILITY TO 1 5/8 SM" - NO LONGER APPROPRIATE.

14. ADDITIONAL FLIGHT DATA: REMOVED "CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N, LT, 199.00 INBOUND" - ALTERNATE MISSED APPROACH REMOVED FROM PROCEDURE PER IFP/ATC CHECKLIST REQUEST.

15. ADDITIONAL FLIGHT DATA: CHANGED FROM "HOLD SE, RT, 332.00 INBOUND" TO "HOLD N, LT, 199.00 INBOUND" - NEW MISSED APPROACH HOLDING OVER CQN NDB FACILITY.

16. ADDITIONAL FLIGHT DATA: CHANGED FROM "CHART FAS OBST: 973 ANTENNA 350540N/0851101W" TO "FAS OBST: 1060 AAO 350549N/0851033W" - NEW CONTROLLING OBSTACLE.

17. ADDITIONAL FLIGHT DATA: ADDED "CHART IN PLANVIEW: (CFDTJ) AT 350753N/0851004W" - PER 8260.19I, PARA 8-6-10P.

18. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR BELOW 6000 AT CQN NDB" - PER 8260.19I, PARA 8-6-10N.

19. ADDITIONAL FLIGHT DATA: REMOVED 7:1 OBSTACLE "CHART: 1080 TANK 350638N/0850944W" - NEW TERRAIN EVALUATION DOES NOT SHOW ANY 7:1 TO OBSTACLES.

20. CHANGED ALTERNATE MINIMUMS FROM "ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT C 800-2 1/4, CAT D 900-3, NA WHEN CONTROL TOWER CLOSED" TO "ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT C 900-2 1/2, CAT D 900-3, NA WHEN CONTROL TOWER CLOSED" - PER 8260.19I, 8-6-11B(5)&(6).

21. CHANGED S-LOC 20 CATS C AND D VISIBILITY FROM 1 1/4 SM TO 1 3/8 SM - PER UPDATED 8260.3E VIS TABLES.

22. CHANGED CIRCLING CAT A MDA/HAA FROM 1300/617 TO 1320/637 - INCREASED TO MATCH LOC STRAIGHT IN MDA.

23. CAT C MDA/HAA FROM 1480/797 TO 1500/817 AND CAT C VISIBILITY FROM 2 1/4 SM TO 2 1/2 SM - NEW CONTROLLING OBSTACLE, PER UPDATED 8260.3E VIS TABLES.

#### COORDINATED WITH:

| A4A 🗙 ALPA 🗶 AOP                                    | a X apa X hai (  | NBAA X                               | OTHER: ZTL, CHA AP  | P CON, CHA ATCT, AMGR |                           |                         |
|---|--|--------------------------------------|---|-----------------------|---------------------------|-------------------------|
| FLIGHT CHECKED BY<br>PENI                           | DING   |                                      | <i>Digitally signed by</i><br><b>CASIMIR L TABAKA</b><br>Mar 24, 2023 | OFFICE                | DATE                      |                         |
| <u>Developed By</u><br>Casimir L. Tabaka (silvia yo | DUNG)  | Digitally signed by CASIMIR L TABAKA |   | OFFICE<br>AJV-A432    | <b>DATE</b><br>01/12/2023 |                         |
| APPROVED BY<br>CASIMIR TABAKA                       | Digitally signed by<br><b>CASIMIR L TABAKA</b><br>Mar 24, 2023 | Mar 24, 2023                         |   | OFFICE<br>AJV-A432    | DATE                      | <u>TITLE</u><br>MANAGER |