

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
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| <b>RNAV (RNP) - STANDARD,<br/>INSTRUMENT APPROACH PROCEDURE,<br/>TITLE 14 CFR PART 97.33</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |                            |         |                                  |                        | Bearings, headings, courses, 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 in feet RVR. |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| TERMINAL ROUTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        | MISSED APPROACH    |         |        |                         |         |  |
| FROM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |        | TO                         |         | COURSE AND DISTANCE              |                        |                                                                                                                                                                                                                                                                                                                                                                      | ALTITUDE       |                      | <b>RNP: DA</b><br><br>CLIMB TO 3000 DIRECT MOMBE AND ON TRACK 099.37 TO NEIL AND HOLD. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 270 FEET PER NM TO 1400.<br><br>ADDITIONAL FLIGHT DATA:<br>HOLD E, RT, 279.00 INBOUND.<br>ROUTE TYPE: A, H<br>ROUTE TYPE QUALIFIER 1: F<br>ROUTE TYPE QUALIFIER 1: S<br>DISTANCE TO THLD FROM 350 HAT: 0.92 NM.<br>CHART MANDATORY 7000 AT JHUDY AND JAAIN.<br>CHART MANDATORY 6000 AT GROHL.<br>CHART MANDATORY 5000 AT HICKR.<br>CHART MINIMUM 6000 AT RUHSH.<br>#TCH 825.7 (DO NOT CHART). |                                        |                    |         |        |                         |         |  |
| JAAIN (IAF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        | TIANT (TF) (FB) (RNP 1.00) |         | 237.99 / 2.82                    |                        |                                                                                                                                                                                                                                                                                                                                                                      | 6000           |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| TIANT (IF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        | WIPPN (TF) (FB) (RNP 1.00) |         | 238.02 / 3.30                    |                        |                                                                                                                                                                                                                                                                                                                                                                      | 5000           |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| WIPPN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        | POAST (RF) (FB) (RNP 1.00) |         | (2.60 NM RADIUS CW (CFRGG))/8.16 |                        |                                                                                                                                                                                                                                                                                                                                                                      | 2500           |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| JHUDY (IAF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        | FRIND (TF) (FB) (RNP 1.00) |         | 237.99 / 2.81                    |                        |                                                                                                                                                                                                                                                                                                                                                                      | 6000           |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| FRIND (IF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        | UVTHE (TF) (FB) (RNP 1.00) |         | 237.99 / 3.30                    |                        |                                                                                                                                                                                                                                                                                                                                                                      | 5000           |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| (SEE FORM 8260-10)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| 1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)<br>2. PROFILE STARTS AT POAST<br>3. FAC: <u>057.90</u> FAF: _____ DIST FAF TO MAP: _____ THLD: _____<br>4. MIN. ALT: <b>POAST 2500, DILYN 2000</b><br>5. DIST TO THLD FROM OM: <u>3.57</u> MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____<br>6. MIN GS INCPT: <u>2000</u> GS ALT AT: <b>DILYN 2000</b> OM: _____ MM: _____ IM: _____<br>7. GS ANGLE: <u>3.10</u> TCH: <u>58.4</u> # <u>20:1 IS CLEAR 34:1 IS CLEAR</u><br>8. MSA FROM: <b>RW06R 3100</b> |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        | MAG VAR: <b>8W</b> |         |        | EPOCH YEAR: <b>2020</b> |         |  |
| MINIMUMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      | ALTERNATE: N A |                      | STANDARD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                        |                    |         |        |                         |         |  |
| CATEGORY =====>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        | A                          |         | B                                |                        |                                                                                                                                                                                                                                                                                                                                                                      | C              |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | D                                      |                    |         | E      |                         |         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DH/MDA | VIS                        | HAT/HAA | DH/MDA                           | VIS                    | HAT/HAA                                                                                                                                                                                                                                                                                                                                                              | DH/MDA         | VIS                  | HAT/HAA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DH/MDA                                 | VIS                | HAT/HAA | DH/MDA | VIS                     | HAT/HAA |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| AUTHORIZATION REQUIRED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| RNP 0.15 DA*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1127   | 3000                       | 350     | 1127                             | 3000                   | 350                                                                                                                                                                                                                                                                                                                                                                  | 1127           | 3000                 | 350                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1127                                   | 3000               | 350     |        |                         |         |  |
| RNP 0.30 DA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1229   | 4500                       | 452     | 1229                             | 4500                   | 452                                                                                                                                                                                                                                                                                                                                                                  | 1229           | 4500                 | 452                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1229                                   | 4500               | 452     |        |                         |         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| NOTES:<br>CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C (0F) OR ABOVE 46C (114F).<br>CHART SPEED ICON IN PLANVIEW AT JAAIN : MAX 210 KIAS.<br>CHART SPEED ICON IN PLANVIEW AT JHUDY : MAX 210 KIAS.<br>CHART SPEED ICON IN PLANVIEW AT GROHL : MAX 210 KIAS.<br>(CONTINUED ON PAGE 2)                                                                                                                                                                                                                                               |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                    |         |        |                         |         |  |
| CITY AND STATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        | ELEVATION: 799             |         |                                  | TDZE: 777              |                                                                                                                                                                                                                                                                                                                                                                      |                | FACILITY IDENTIFIER: |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PROCEDURE NO./AMDT NO./EFFECTIVE DATE: |                    |         |        | SUP:                    |         |  |
| CLEVELAND, OH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |        | AIRPORT NAME:              |         |                                  | CLEVELAND-HOPKINS INTL |                                                                                                                                                                                                                                                                                                                                                                      |                | RNAV                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RNAV (RNP) Z RWY 6R, ORIG              |                    |         |        | AMDT: NONE              |         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |                            |         |                                  |                        |                                                                                                                                                                                                                                                                                                                                                                      |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 24 MAY 2018                            |                    |         |        | DATED                   |         |  |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                           |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                           |                                   | Bearings, headings, courses, 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 in feet RVR. |                                                                                     |
| RNAV (RNP) - STANDARD,<br>INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                           |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |
| TERMINAL ROUTES, (CONT.):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                           |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |
| FROM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | TO                                                        | COURSE AND DISTANCE               | ALTITUDE                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |
| UVTHE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | POAST (RF) (FB) (RNP 1.00)                                | (2.80 NM RADIUS CCW (CFFCQ))/8.82 | 2500                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| GROHL (IAF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BEEEE (TF) (FB) (RNP 1.00)                                | 000.13 / 6.04                     | 4000                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| BEEEE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DOORZ (RF) (FB) (RNP 1.00)                                | (3.60 NM RADIUS CW (CFFFL))/3.63  | 2900                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| HICKR (IAF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SCANZ (TF) (FB) (RNP 1.00)                                | 137.43 / 3.65                     | 4000                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| SCANZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DOORZ (RF) (FB) (RNP 1.00)                                | (3.20 NM RADIUS CCW (CFVJB))/4.45 | 2900                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| RUHSH (IAF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RMONZ (TF) (FB) (RNP 1.00)                                | 057.76 / 6.18                     | 4000                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| RMONZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DOORZ (TF) (FB) (RNP 1.00)                                | 057.83 / 3.50                     | 2900                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| DOORZ (IF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | POAST (TF) (FB) (RNP 1.00)                                | 057.87 / 1.42                     | 2500                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| POAST                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DILYN (TF) (FB) (RNP 1.00)                                | 057.88 / 1.58                     | 2000                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| DILYN (FAF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RW06R (MAP) (TF) (FO) (RNP 0.30)                          | 057.90 / 3.57                     |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |
| RW06R (MAP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1127 MSL (CA)                                             | 057.90                            |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |
| 1127 MSL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | MOMBE (DF) (FB) (RNP 1.00)                                |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |
| MOMBE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | NEIIL (TF) (FO) (RNP 1.00)                                | 099.37 / 6.65                     | 3000                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
| NOTES, (CONT.):<br>CHART SPEED ICON IN PLANVIEW AT HICKR : MAX 210 KIAS.<br>CHART SPEED ICON IN PLANVIEW AT RUHSH : MAX 210 KIAS.<br>CHART PLANVIEW NOTE ADJACENT TO JAAIN: RF REQUIRED.<br>CHART PLANVIEW NOTE ADJACENT TO JHUDY: RF REQUIRED.<br>CHART PLANVIEW NOTE ADJACENT TO GROHL: RF REQUIRED.<br>CHART PLANVIEW NOTE ADJACENT TO HICKR: RF REQUIRED.<br>CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.<br>PBN REQUIREMENTS NOTE: RNP AR APCH<br>CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.15 ALL CATS VISIBILITY TO RVR 5500. |                                                           |                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |
| CITY AND STATE<br>CLEVELAND, OH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ELEVATION: 799<br>AIRPORT NAME:<br>CLEVELAND-HOPKINS INTL | TDZE: 777                         | FACILITY IDENTIFIER:<br>RNAV                                                                                                                                                                                                                                                                                                                                         | PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:<br>RNAV (RNP) Z RWY 6R, ORIG<br>24 MAY 2018 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                           |                                   |                                                                                                                                                                                                                                                                                                                                                                      | SUP:                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                           |                                   |                                                                                                                                                                                                                                                                                                                                                                      | AMDT: NONE                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                           |                                   |                                                                                                                                                                                                                                                                                                                                                                      | DATED:                                                                              |

QUALITY  
16  
CHECKED