

FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
Distances are in nautical miles (NM). Graphic depictions attached.

| Arrival Name<br>KKISS (RNAV) | Number<br>ONE                | STAR Computer Code<br>RKCTY.KKISS1 | Superseded Number<br>NONE | Dated        | Effective Date<br>19 JUL 2018 |       |      |     |                            |  |  |
|------------------------------|------------------------------|------------------------------------|---------------------------|--------------|-------------------------------|-------|------|-----|----------------------------|--|--|
| TRANSITION ROUTES:           |                              |                                    |                           |              |                               |       |      |     |                            |  |  |
| Transition Name              | Transition<br>Computer Codes | From<br>FIX/NAVAID                 | To<br>FIX/NAVAID          | Mag Course   | Distance                      | MEA   | MOCA | MAA | Crossing Altitudes / Fixes |  |  |
| DUUDA                        | DUUDA.KKISS1                 | DUUDA                              | DUUDA                     |              |                               |       |      |     |                            |  |  |
|                              |                              |                                    | CCRIS                     | 089.61       | 29.40                         | 10000 | 2400 |     | BETWEEN FL210 AND FL230    |  |  |
|                              |                              |                                    | FRELE                     | 131.36       | 20.22                         | 10000 | 2200 |     | BETWEEN FL190 AND FL210    |  |  |
|                              |                              |                                    | SMMNS                     | 130.88       | 19.85                         | 10000 | 2300 |     |                            |  |  |
| HOOTA                        | HOOTA.KKISS1                 | HOOTA                              | RKCTY                     | 131.06       | 07.96                         | 10000 | 2300 |     | BETWEEN 17000 AND FL210    |  |  |
|                              |                              |                                    | STIDL                     | 124.87       | 50.18                         | 10000 | 2600 |     |                            |  |  |
|                              |                              |                                    | BUCKE                     | 125.47       | 13.69                         | 10000 | 2400 |     |                            |  |  |
|                              |                              |                                    | CCRIS                     | 129.49       | 18.30                         | 10000 | 2500 |     | BETWEEN FL210 AND FL230    |  |  |
|                              |                              |                                    | FRELE                     | 131.36       | 20.22                         | 10000 | 2200 |     | BETWEEN FL190 AND FL210    |  |  |
|                              |                              |                                    | SMMNS                     | 130.88       | 19.85                         | 10000 | 2300 |     |                            |  |  |
|                              |                              |                                    | RKCTY                     | 131.06       | 07.96                         | 10000 | 2300 |     | BETWEEN 17000 AND FL210    |  |  |
|                              |                              |                                    | OLYEE                     | OLYEE.KKISS1 | OLYEE                         | OLYEE |      |     |                            |  |  |
|                              |                              |                                    | ENGRM                     | 083.98       | 18.44                         | 10000 | 2300 |     |                            |  |  |
|                              |                              |                                    | DYWKR                     | 084.88       | 06.06                         | 10000 | 2200 |     | BETWEEN FL200 AND FL230    |  |  |
|                              |                              |                                    | FRELE                     | 084.85       | 20.84                         | 10000 | 2200 |     | BETWEEN FL190 AND FL210    |  |  |
|                              |                              |                                    | SMMNS                     | 130.88       | 19.85                         | 10000 | 2300 |     |                            |  |  |
|                              |                              |                                    | RKCTY                     | 131.06       | 07.96                         | 10000 | 2300 |     | BETWEEN 17000 AND FL210    |  |  |
|                              |                              |                                    | PORZL                     | PORZL.KKISS1 | PORZL                         | PORZL |      |     |                            |  |  |
|                              |                              |                                    | CHEFE                     | 093.84       | 47.07                         | 10000 | 2300 |     |                            |  |  |
|                              |                              |                                    | BUCKE                     | 096.37       | 36.74                         | 10000 | 2900 |     |                            |  |  |
|                              |                              |                                    | CCRIS                     | 129.49       | 18.30                         | 10000 | 2500 |     | BETWEEN FL210 AND FL230    |  |  |
|                              |                              |                                    | FRELE                     | 131.36       | 20.22                         | 10000 | 2200 |     | BETWEEN FL190 AND FL210    |  |  |
|                              |                              |                                    | SMMNS                     | 130.88       | 19.85                         | 10000 | 2300 |     |                            |  |  |
|                              |                              |                                    | RKCTY                     | 131.06       | 07.96                         | 10000 | 2300 |     | BETWEEN 17000 AND FL210    |  |  |



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| Arrival Name        | Number     | STAR Computer Code  | Superseded Number | Dated | Effective Date     |
|---------------------|------------|---------------------|-------------------|-------|--------------------|
| <b>KKISS (RNAV)</b> | <b>ONE</b> | <b>RKCTY.KKISS1</b> | <b>NONE</b>       |       | <b>19 JUL 2018</b> |

ARRIVAL ROUTE DESCRIPTION:

FROM RKCTY ON TRACK 141.16/12.27 TO CROSS KKISS BETWEEN 13000 AND 15000, THEN ON TRACK 140.21/12.09 TO CROSS STLEY BETWEEN 10000 AND 11000 AND AT 250 KIAS, THEN ON TRACK 140.34/7.69 TO CROSS ZUBBY AT OR ABOVE 8000.

LANDING RWY 3L/R: FROM ZUBBY ON TRACK 143.59/12.97 TO QWYNN, THEN ON TRACK 214.07/3.68 TO CROSS ROYYY AT 8000 AND AT 210 KIAS, THEN ON TRACK 215.68. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING RWY 4L/R: FROM ZUBBY ON TRACK 216.18/8.01 TO CROSS SKRUG AT 7000 AND AT 210 KIAS, THEN ON TRACK 218.18. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED

NOTE: RNAV 1

NOTE: DME/DME/IRU OR GPS REQUIRED

NOTE: USE RUNWAY 4L TRANSITION. EXPECT RUNWAY ASSIGNMENT FROM DETROIT TRACON PRIOR TO STLEY.

NOTE: FOR USE WHEN DTW IS IN NORTH FLOW. WHEN DTW IS IN SOUTH FLOW, FILE AND EXPECT THE RKCTY RNAV STAR.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT BUCKE: HOLD W, LT, 096.37 INBOUND, 10 NM LEGS.

CHART HOLDING AT CHEFE: HOLD W, LT, 093.84 INBOUND, 10 NM LEGS.

CHART HOLDING AT PORZL: HOLD W, LT, 093.84 INBOUND, 10 NM LEGS.

CHART HOLDING AT SMMNS: HOLD NW, RT, 130.88 INBOUND, 10 NM LEGS.

CHART HOLDING AT STIDL: HOLD NW, LT, 124.87 INBOUND, 10 NM LEGS.

COMMUNICATIONS:

DTW ATIS, DETROIT APP CON

AIRPORTS SERVED:

DETROIT METROPOLITAN WAYNE COUNTY, DETROIT, MI (KDTW)

LOST COMMUNICATIONS PROCEDURE:

REMARKS:

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)

REFERENCE MAGNETIC VARIATION = KDTW 07W/2020

CHART AT ROYYY TERMINUS: KDTW LDG RWY 3L/R

CHART AT SKRUG TERMINUS: KDTW LDG RWY 4L/R

DO NOT CHART MOCAs

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| Arrival Name                | Number                      | STAR Computer Code             | Superseded Number | Dated                                                | Effective Date     |
|-----------------------------|-----------------------------|--------------------------------|-------------------|------------------------------------------------------|--------------------|
| <b>KKISS (RNAV)</b>         | <b>ONE</b>                  | <b>RKCTY.KKISS1</b>            | <b>NONE</b>       |                                                      | <b>19 JUL 2018</b> |
| <u>FLIGHT INSPECTED BY:</u> |                             |                                |                   |                                                      |                    |
|                             | ROBERT W NICHOLS            | FICO                           | 03/21/2018        | <i>Digitally signed by</i><br><b>DONALD H LANIER</b> |                    |
|                             | Name                        | Organization                   | Date              | Mar 26, 2018<br><i>Digitally signed by</i> Signature |                    |
| <u>DEVELOPED BY:</u>        |                             |                                |                   |                                                      |                    |
|                             | MIKE FERRELL                | CLEVELAND ARTCC METROPLEX LEAD | 08/30/2017        | <i>Digitally signed by</i><br><b>DONALD H LANIER</b> |                    |
|                             |                             |                                |                   | Mar 26, 2018<br><i>Digitally signed by</i> Signature |                    |
| <u>APPROVED BY:</u>         |                             |                                |                   |                                                      |                    |
|                             | MARLON J. ROBINSON, MANAGER | AJV-5440                       |                   | <i>Digitally signed by</i><br><b>DONALD H LANIER</b> |                    |
|                             | Name                        | Organization                   | Date              | Mar 26, 2018<br>Signature                            |                    |

CHANGES:REASONS:

04/06/2018: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/30/2017.

1. CHANGED ALTITUDE RESTRICTION AT DYKWR FROM AT/BELOW FL210 TO FL200BFL230.
2. CHANGED ALTITUDE RESTRICTION AT CCRIS FROM AT/BELOW FL230 TO FL210BFL230.



FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STAR (DATA RECORD)

| Arrival Name<br>KKISS (RNAV) |                          | Number<br>ONE |       | STAR Computer Code<br>RKCTY.KKISS1 |        | Superseded Number<br>NONE |             | Dated   | Effective Date<br>19 JUL 2018 |
|------------------------------|--------------------------|---------------|-------|------------------------------------|--------|---------------------------|-------------|---------|-------------------------------|
| FIX/NAVAID                   | LAT/LONG                 | C             | FO/FB | LEG<br>TYPE                        | TC     | DIST<br>(NM)              | ALTITUDE    | SPEED   | REMARKS                       |
| En Route Transition          |                          |               |       |                                    |        |                           |             |         |                               |
| DUUDA                        | 430434.54N / 0853128.92W | Y             |       | IF                                 |        |                           |             |         | DUUDA.KKISS1                  |
| CCRIS                        | 430814.70N / 0845139.54W | Y             | FB    | TF                                 | 082.61 | 29.40                     | FL210BFL230 | AT 280K |                               |
| FRELE                        | 425647.49N / 0842855.97W | Y             | FB    | TF                                 | 124.36 | 20.22                     | FL190BFL210 | AT 280K |                               |
| SMMNS                        | 424541.33N / 0840633.80W | Y             | FB    | TF                                 | 123.88 | 19.85                     |             |         |                               |
| RKCTY                        | 424113.45N / 0835737.29W | Y             | FB    | TF                                 | 124.06 | 07.96                     | 17000BFL210 | AT 280K |                               |
| En Route Transition          |                          |               |       |                                    |        |                           |             |         |                               |
| HOOTA                        | 434823.74N / 0863005.58W | Y             |       | IF                                 |        |                           |             |         | HOOTA.KKISS1                  |
| STIDL                        | 432439.60N / 0852913.79W | Y             | FB    | TF                                 | 117.87 | 50.18                     |             |         |                               |
| BUCKE                        | 431806.61N / 0851244.70W | Y             | FB    | TF                                 | 118.47 | 13.69                     |             |         |                               |
| CCRIS                        | 430814.70N / 0845139.54W | Y             | FB    | TF                                 | 122.49 | 18.30                     | FL210BFL230 | AT 280K |                               |
| FRELE                        | 425647.49N / 0842855.97W | Y             | FB    | TF                                 | 124.36 | 20.22                     | FL190BFL210 | AT 280K |                               |
| SMMNS                        | 424541.33N / 0840633.80W | Y             | FB    | TF                                 | 123.88 | 19.85                     |             |         |                               |
| RKCTY                        | 424113.45N / 0835737.29W | Y             | FB    | TF                                 | 124.06 | 07.96                     | 17000BFL210 | AT 280K |                               |
| En Route Transition          |                          |               |       |                                    |        |                           |             |         |                               |
| OLYEE                        | 424704.67N / 0852910.01W | Y             |       | IF                                 |        |                           |             |         | OLYEE.KKISS1                  |
| ENGRM                        | 425111.45N / 0850444.33W | Y             | FB    | TF                                 | 076.98 | 18.44                     |             |         |                               |
| DYWKR                        | 425227.56N / 0845640.60W | Y             | FB    | TF                                 | 077.88 | 06.06                     | FL200BFL230 |         |                               |
| FRELE                        | 425647.49N / 0842855.97W | Y             | FB    | TF                                 | 077.85 | 20.84                     | FL190BFL210 | AT 280K |                               |
| SMMNS                        | 424541.33N / 0840633.80W | Y             | FB    | TF                                 | 123.88 | 19.85                     |             |         |                               |
| RKCTY                        | 424113.45N / 0835737.29W | Y             | FB    | TF                                 | 124.06 | 07.96                     | 17000BFL210 | AT 280K |                               |
| En Route Transition          |                          |               |       |                                    |        |                           |             |         |                               |
| PORZL                        | 431535.51N / 0870725.38W | Y             |       | IF                                 |        |                           |             |         | PORZL.KKISS1                  |
| CHEFE                        | 431753.30N / 0860303.37W | Y             | FB    | TF                                 | 086.84 | 47.07                     |             |         |                               |
| BUCKE                        | 431806.61N / 0851244.70W | Y             | FB    | TF                                 | 089.37 | 36.74                     |             |         |                               |
| CCRIS                        | 430814.70N / 0845139.54W | Y             | FB    | TF                                 | 122.49 | 18.30                     | FL210BFL230 | AT 280K |                               |
| FRELE                        | 425647.49N / 0842855.97W | Y             | FB    | TF                                 | 124.36 | 20.22                     | FL190BFL210 | AT 280K |                               |



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STAR (DATA RECORD)

|                                     |                      |                                           |                                  |       |                                      |
|-------------------------------------|----------------------|-------------------------------------------|----------------------------------|-------|--------------------------------------|
| Arrival Name<br><b>KKISS (RNAV)</b> | Number<br><b>ONE</b> | STAR Computer Code<br><b>RKCTY.KKISS1</b> | Superseded Number<br><b>NONE</b> | Dated | Effective Date<br><b>19 JUL 2018</b> |
|-------------------------------------|----------------------|-------------------------------------------|----------------------------------|-------|--------------------------------------|

| FIX/NAVAID | LAT/LONG                 | C | FO/FB | LEG<br>TYPE | TC     | DIST<br>(NM) | ALTITUDE    | SPEED   | REMARKS |
|------------|--------------------------|---|-------|-------------|--------|--------------|-------------|---------|---------|
| SMMNS      | 424541.33N / 0840633.80W | Y | FB    | TF          | 123.88 | 19.85        |             |         |         |
| RKCTY      | 424113.45N / 0835737.29W | Y | FB    | TF          | 124.06 | 07.96        | 17000BFL210 | AT 280K |         |

**Common Route**

|       |                          |   |    |    |        |       |               |         |              |
|-------|--------------------------|---|----|----|--------|-------|---------------|---------|--------------|
| RKCTY | 424113.45N / 0835737.29W | Y |    | IF |        |       | 17000BFL210   | AT 280K | RKCTY.KKISS1 |
| KKISS | 423239.89N / 0834543.03W | Y | FB | TF | 134.16 | 12.27 | 13000B15000   |         |              |
| STLEY | 422422.40N / 0833349.32W | Y | FB | TF | 133.21 | 12.09 | 10000B11000   | AT 250K |              |
| ZUBBY | 421905.14N / 0832616.73W | Y | FB | TF | 133.34 | 07.69 | AT/ABOVE 8000 |         |              |

**Runway Transition**

|                    |                          |   |    |    |        |       |               |         |                                 |
|--------------------|--------------------------|---|----|----|--------|-------|---------------|---------|---------------------------------|
| ZUBBY              | 421905.14N / 0832616.73W | Y |    | IF |        |       | AT/ABOVE 8000 |         |                                 |
| QWYNN              | 420938.82N / 0831417.53W | Y | FB | TF | 136.59 | 12.97 |               |         |                                 |
| ROYYY              | 420622.01N / 0831632.58W | Y | FO | TF | 207.07 | 03.68 | AT 8000       | AT 210K |                                 |
| KDTW:RWY 3L,RWY 3R |                          |   |    | FM | 208.68 |       |               |         | RECOMMENDED NAVAID: AIR VOR/DME |

**Runway Transition**

|                    |                          |   |    |    |        |       |               |         |                                 |
|--------------------|--------------------------|---|----|----|--------|-------|---------------|---------|---------------------------------|
| ZUBBY              | 421905.14N / 0832616.73W | Y |    | IF |        |       | AT/ABOVE 8000 |         |                                 |
| SKRUG              | 421205.24N / 0833131.96W | Y | FO | TF | 209.18 | 08.01 | AT 7000       | AT 210K |                                 |
| KDTW:RWY 4L,RWY 4R |                          |   |    | FM | 211.18 |       |               |         | RECOMMENDED NAVAID: AIR VOR/DME |

