FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS SERVICE RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE **TITLE 14 CFR PART 97.33**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

PROCEDURE NAME AIRPORT ID ASH

ORIGINAL/AMENDMENT

CITY

STATE

AIRPORT ELEVATION

RNAV (GPS) RWY 14

3

NASHUA

NH **EPOCH YEAR**

200

TDZE 200

SUPERSEDED

ORIGINAL/AMENDMENT 2

DATED 04/22/2021 **MAG VAR** 16W

1995

FACILITY

RNAV (GPS) RWY 14

ACTUAL EFFECTIVE DATE

REQUIRED EFFECTIVE DATE

CANCEL/SUSPEND

RNAV

COORDINATES OF FACILITIES

5 SEPTEMBER 2024

ROUTINE

TERMINAL ROUTES

| FROM | FIX TYPE | <u>TO</u> | FIX TYPE | LEG TYPE | FO/FB | RNP | COURSE | DISTANCE | ALTITUDE |
|-----------------------|----------|-----------------------|----------|----------|-------|------|--------|----------|----------|
| CON VOR/DME | | TUMAE | | TF | FB | 1.00 | 213.29 | 14.43 | 3800 |
| TUMAE | IAF | MUGGY | NOPT | TF | FB | 1.00 | 228.59 | 6.71 | 3800 |
| MUGGY | IF/IAF | LODTI | | TF | FB | 1.00 | 138.53 | 4.29 | 2500 |
| LODTI | | NORIY | | TF | FB | 1.00 | 138.59 | 3.58 | 1600 |
| NORIY | FAF | HESKO/2.40 NM TO RW14 | | TF | FB | 0.30 | 138.64 | 1.85 | |
| HESKO/2.40 NM TO RW14 | | RW14 | MAP | TF | FO | 0.30 | 138.64 | 2.40 | |
| RW14 | MAP | 800 MSL | | CA | | | 138.64 | | 800 |
| 800 MSL | | PELAN | | DF | FO | 1.00 | | | 2000 |

MISSED APPROACH

MAP:

LPV: DA LNAV/VNAV: DA

LNAV: RW14

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 800 THEN CLIMBING LEFT TURN TO 2000 DIRECT PELAN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

SIDE OF COURSE OUTBOUND **FT WITHIN MILES OF** (IAF)

2. HOLD NW MUGGY, LT, 138.69 INBOUND, 3800 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 138.64 FAF: NORIY DIST FAF TO MAP: 4.25 DIST FAF TO THLD: 4.25

MIN ALT: MUGGY 3800, LODTI 2500, NORIY 1600, HESKO/2.40 NM TO RW14 1000

DIST TO THLD FROM OM: MM: IM: 150 HAT: 200 HAT: 0.48 GS ANT:

MIN GP INCPT: 1600 **GP ALT AT PFAF: NORIY 1600** OM: MM: IM:

GP ANGLE: 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH**: 47.0 MSA FROM: RW14 4400

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 AIRPORT ID
 PROCEDURE NAME
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 STATE

 ASH
 RNAV (GPS) RWY 14
 3
 NASHUA
 NH

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON CON VOR/DME AIRWAY RADIALS 223 CW 246.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 1/8 SM AND LNAV CAT C/D VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

HOLD E, RT, 262.45 INBOUND.
CHART FAS OBST: 445 TREE 424639N/0713139W.
CHART 752 TOWER (33-000074) 424816N/0713749W.
CHART VDP AT 1.42 NM TO RW14.
WAAS CHANNEL # 97730
REFERENCE PATH ID: W14A
CHART CIRCLING ICON.
LTP HAE: 33.5 M

MINIMUMS:

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

ALTERNATE: NA STANDARD - CAT D 800-2 1/2, NA WHEN LOCAL WEATHER NOT AVAILABLE.

| CATEGORY: | A | | | В | | | С | | | D | | | E | | |
|--------------|--------|------------|---------|--------|------------|---------|--------|------------|---------|--------|------------|---------|--------|------------|---------|
| FINAL TYPE | DA/MDA | <u>VIS</u> | HAT/HAA |
| LPV DA | 400 | 1/2 | 200 | 400 | 1/2 | 200 | 400 | 1/2 | 200 | 400 | 1/2 | 200 | | | |
| LNAV/VNAV DA | 614 | 3/4 | 414 | 614 | 3/4 | 414 | 614 | 3/4 | 414 | 614 | 3/4 | 414 | | | |
| LNAV MDA | 700 | 1/2 | 500 | 700 | 1/2 | 500 | 700 | 1 | 500 | 700 | 1 | 500 | | | |
| CIRCLING | 840 | 1 | 640 | 860 | 1 | 660 | 920 | 2 | 720 | 980 | 2 1/2 | 780 | | | |

CHANGES - REASONS

- 1. TERMINAL ROUTES: DELETED "POINT" IN FIX TYPE FOR CON VOR/DME FEEDER LEG UNSUPPORTED BY 8260.191
- 2. TERMINAL ROUTES: CHANGED FEEDER CON VOR/DME TO TUMAE COURSE AND DISTANCE FROM 213.42/14.55 TO 213.29/14.43 AND INITIAL LEG TUMAE TO MUGGY FROM 228.57/6.59 TO 228.59/6.71 MOVED TUMAE .12 NM TO MEET MINIMUM LEG LENGTH.
- 3. TERMINAL ROUTES: CHANGED MUGGY TO LODTI COURSE AND DISTANCE FROM 138.69/4.67 TO 138.53/4.29 AND LODTI TO NORIY DISTANCE FROM 3.20 TO 3.58 LODTI POSITION MOVED DUE TO ILS OR LOC RWY 14 FIX RELOCATION REQUIREMENT TO MEET SATISFACTORY INTERSECTION CRITERIA.
- 4. PROFILE: LINE 2 CHANGED HOLDING AT MUGGY FROM 138.49 INBOUND TO 138.69 INBOUND ALIGNED TP MATCH THE ILS OR LOC RWY 14 INBOUND COURSE.
- 5. PROFILE: LINE 4 DELETED ASTERISK AT "HESKO/2.40 NM TO RW14 1000" IAW 8260.19I, 1-1-5.F (12).
- 6. CHANGED PBN REQUIREMENTS NOTE: "RNP APCH." TO "RNP APCH GPS." IAW 8260.19I PARA 8-6-8.B (2).
- 7. NOTES: UPDATED CHART NOTE FROM "FOR INOPERATIVE ALS, INCREASE LNAV CAT C/D VISIBILITY TO 1 3/8 SM." TO "FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 1/8 SM AND LNAV CAT C/D VISIBILITY TO 1 3/8 SM." DUE TO NEW TARGETS EVALUATION/MINIMUMS.
- 8. ADDITIONAL FLIGHT DATA: AMENDED "HOLD E, RT, 266.83 INBOUND" TO "HOLD E, RT, 262.45 INBOUND" CHANGED INBOUND HEADING TO MATCH NEW ILS OR LOC RWY 14 HOLDING PATTERN.
- 9. ADDITIONAL FLIGHT DATA: CHANGED CHART FAS OBST FROM "435 TREE 424637N/0713135W" TO "445 TREE 424639N/0713139W" DUE TO NEW TARGETS EVALUATION/CONTROLLING OBSTACLE.
- OBSTACLE.
 10. ADDITIONAL FLIGHT DATA: AMENDED NOTE FROM "CHART 752 TOWER 424816N/0713749W" TO "CHART 752 TOWER (33-000074) 424816N/0713749W" ADDED OBSTACLE NUMBER IAW 8260.19I PARA 8-6-10.C.
- 11. ADDITIONAL FLIGHT DATA: DELETED NOTE "*LNAV ONLY" AND ASTERISK AFTER "CHART VDP AT 1.42 NM TO RW24" IAW 8260.19I, 1-1-5.F (12).
- 12. MINIMUMS: INCREASED LNAV/VNAV DA/HAT FROM 596/396 TO 614/414 AND VISIBILITY FROM 5/8 SM TO 3/4 SM NEW CONTROLLING OBSTÀCLES BASED ON NEW TARGETS EVALUATION.
 13. CIRCLING MINIMUMS: INCREASED MDA/HAA CAT A FROM 820/620 TO 840/640, INCREASED CAT B FROM 840/640 TO 860/660, INCREASED CAT C FROM 900/700 TO 920/720, AND REDUCED
- CAT D FROM 1000/800 TO 980/780 NEW CONTROLLING OBSTACLES BASED ON NEW TARGETS EVALUATION.

QUALITY

AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE **ASH** RNAV (GPS) RWY 14 3 **NASHUA** NH **COORDINATED WITH: AOPA** Х **APA NBAA** OTHER: ALPA x HAI ZBW, BOS APP CON, ASH ATCT Digitally signed by **OFFICE** DATE FLIGHT CHECKED BY CASIMIR L TABAKA JEREMY R VIRTS 01/17/2024 FPO Jun 18, 2024 Digitally signed by **OFFICE** DATE **DEVELOPED BY** CASIMIR L TABAKA CASIMIR L. TABAKA (CHRISTOPHER D. WILKINSON) AJV-A432 09/12/2023 Jun 18, 2024 Digitally signed by **APPROVED BY** OFFICE DATE TITLE CASIMIR L TABAKA CASIMIR L. TABAKA AJV-A432 MANAGER Jun 18, 2024 **FAS DATA BLOCK INFORMATION DATA FIELD** DATA **OPERATION TYPE** 0 SBAS SERVICE PROVIDER IDENTIFIER 0 AIRPORT IDENTIFIER KASH **RUNWAY RW14** APPROACH PERFORMANCE DESIGNATOR 0 **ROUTE INDICATOR** REFERENCE PATH DATA SELECTOR 0 REFERENCE PATH IDENTIFIER (APPROACH ID) W14A LTP/FTP LATITUDE 424712.6980N LTP/FTP LONGITUDE 0713124.5985W LTP/FTP ELLIPSOIDAL HEIGHT +00335 FPAP LATITUDE 424624.5440N **FPAP LONGITUDE** 0712942.7885W THRESHOLD CROSSING HEIGHT (TCH) 00047.0 TCH UNITS SELECTOR (METERS OR FEET USED) F **GLIDEPATH ANGLE (GPA)** 03.00 **COURSE WIDTH AT THRESHOLD** 106.75 LENGTH OFFSET 0920 HORIZONTAL ALERT LIMIT (HAL) 40.0 35.0 VERTICAL ALERT LIMIT (VAL) **CRC REMAINDER** 4691201C ADDITIONAL PATH POINT RECORD INFORMATION **ICAO CODE** K6 LTP ORTHOMETRIC HEIGHT +00611 **FPAP ORTHOMETRIC HEIGHT** +00611