

# APPENDIX 1 LEGEND

00000  
**LEGEND**

## LEGEND

### STANDARD TERMINAL ARRIVAL (STAR) CHARTS DEPARTURE PROCEDURE (DP) CHARTS

Applies to both STAR and DP Charts unless otherwise noted.

#### RADIO AIDS TO NAVIGATION

VOR (Compulsory)	VORTAC (Compulsory)	NDB (Compulsory)
VOR/DME (Compulsory)	TACAN (Compulsory)	NDB/DME (Compulsory)
VOR (Non-Compulsory)	TACAN (Non-Compulsory)	NDB (Non-Compulsory)
VOR/DME (Non-Compulsory)	NDB/DME (Non-Compulsory)	
VORTAC (Non-Compulsory)		

LMM, LOM (Compass locator)  
 Marker Beacon

LOC (shown when installation is offset from its normal position off the end of the runway.) (DP)  
 LOC/DME

Localizer Course  
 SDF Course

(T) indicates frequency protection range (STAR)  
 (Y) TACAN must be placed in "Y" mode to receive distance information

**ORLANDO Example:**  
 Frequency: 112.25 (T) ORL Chan 59 (Y) N28°32.56' W81°20.10'  
 L-19, H-5 DME or TACAN Channel Reference  
 Underline indicates no voice transmitted on this frequency

**PRAYS Example:**  
 Coordinates: N38°58.30' W89°51.50'  
 Frequency: 112.7 CAP 187.1°-56.2  
 Identifier: 590 Reference Facility Elevation Radial-Distance (Facility to Waypoint)

#### FIXES/ATC REPORTING REQUIREMENTS

Reporting Points  
 N00°00.00'  
 W00°00.00'

(75) → DME Mileage (when not obvious)

▲ Fix-Compulsory and  
 △ Non-Compulsory Position Report

→ DME fix

WAYPOINT (Compulsory)    WAYPOINT (Non-Compulsory)

FLYOVER POINT

X Computer Navigation Fix (CNF)  
 N00°00.00'  
 W00°00.00'

#### ROUTES

4500 MEA-Minimum Enroute Altitude  
 \*3500 MOCA-Minimum Obstruction Clearance Altitude  
 ← 270° → (65) Mileage between Radio Aids, Reporting Points, and Route Breaks

Transition Route  
 R-275 Radial line and value  
 Lost Communications Track

V12 J80 Airway/Jet Route Identification  
 DP Holding Pattern STAR Holding Pattern

(IAS) (IAS)  
 Holding pattern with max. restricted airspeed (175K) applies to all altitudes (210K) applies to altitudes above 6000' to and including 14000'

#### SPECIAL USE AIRSPACE

R-352 R-Restricted  
 P-Prohibited W-Warning  
 A-Alert  
 MOA-Military Operations Area

#### ALTITUDES

5500 Mandatory Altitude (Cross at)  
2300 Minimum Altitude (Cross at or above)  
4800 Maximum Altitude (Cross at or below)

1500  
12000 Block Altitude

→ Altitude change at other than Radio Aids (STAR)

#### INDICATED AIRSPEED

175K Mandatory Airspeed    120K Minimum Airspeed    250K Maximum Airspeed

#### AIRPORTS

(DP) Civil    Military    Joint Civil-Military

Airports not served by the procedure shown in screened color (STAR)

Civil    Military    Joint Civil-Military

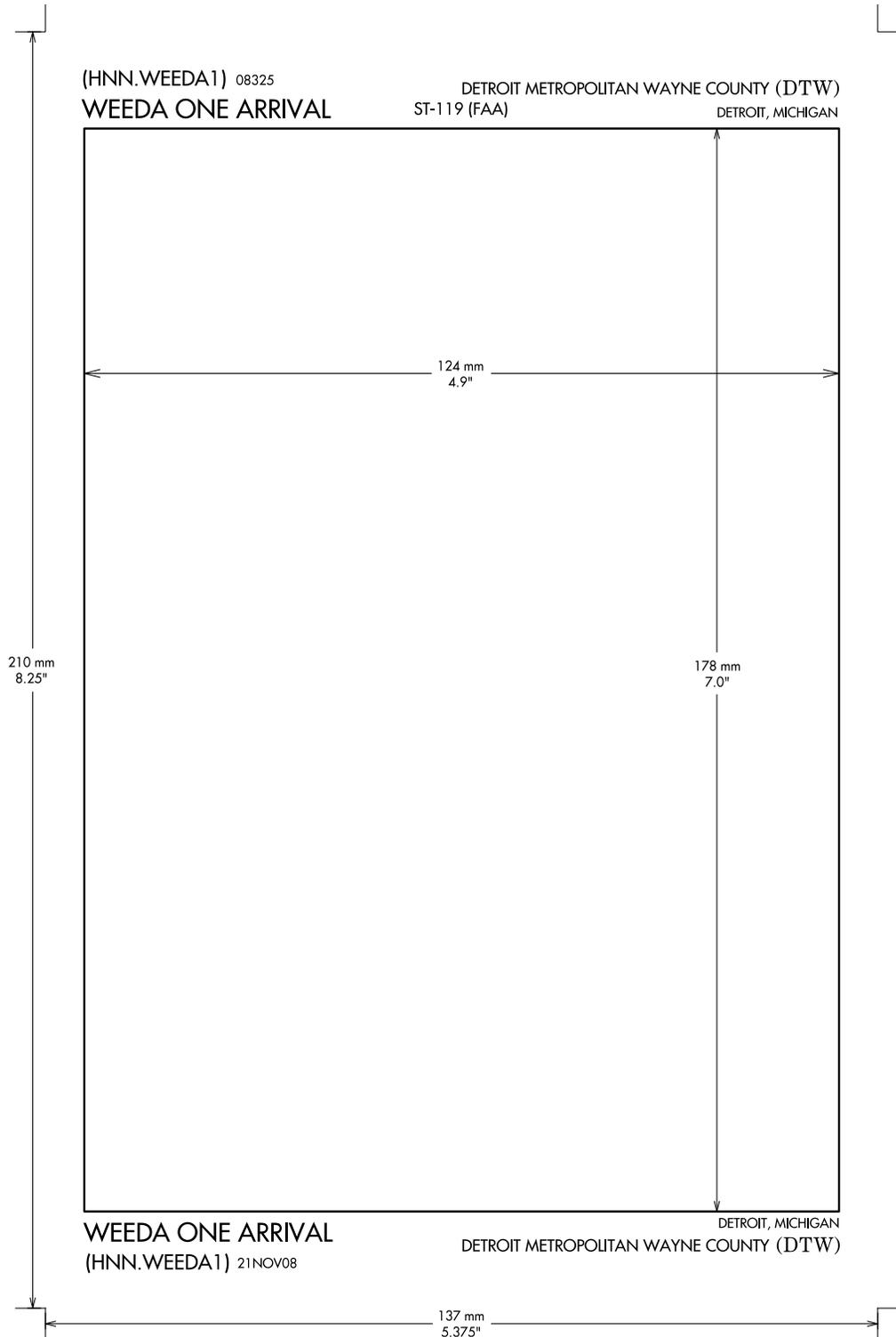
#### MISCELLANEOUS

Changeover Point  
 Distance not to scale (DP)  
 International Boundary (DP)  
 Air Defense Identification Zone

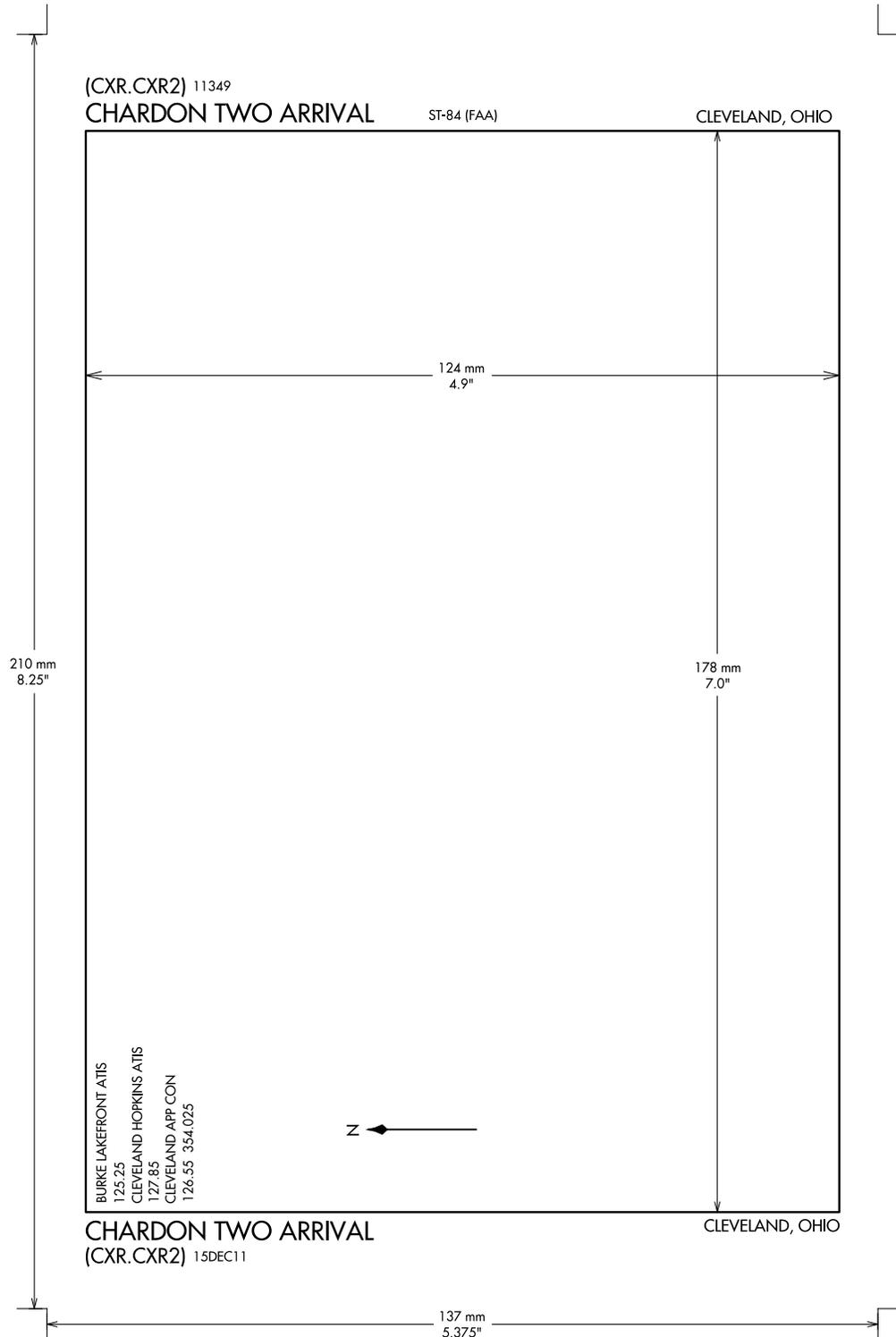
Takeoff Minimums and (Obstacle) Departure Procedures entry published. (DP)

**LEGEND**

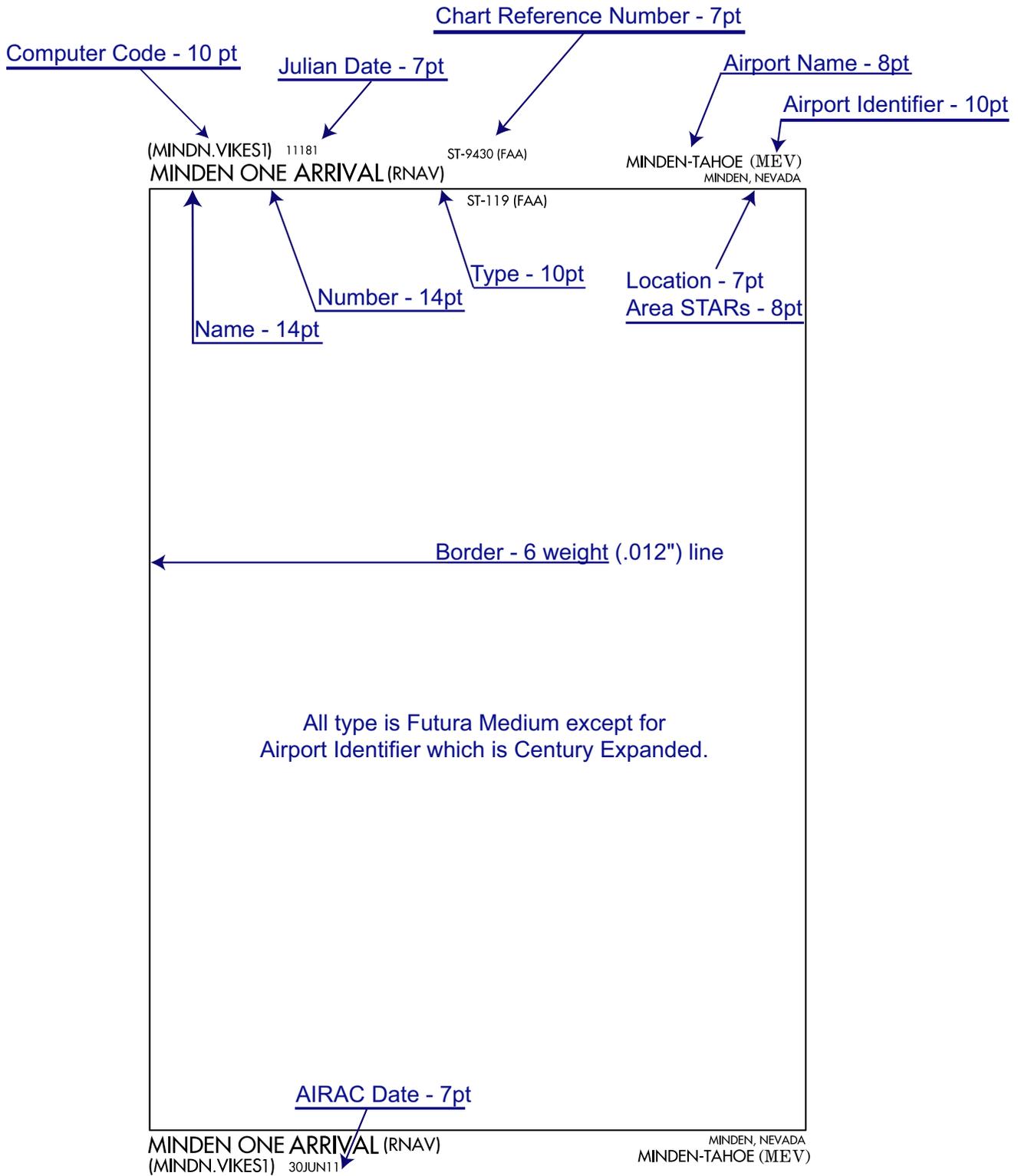
APPENDIX 2  
PAGE LAYOUT



### APPENDIX 3 EAST WEST PAGE LAYOUT



### APPENDIX 4 MARGIN DATA



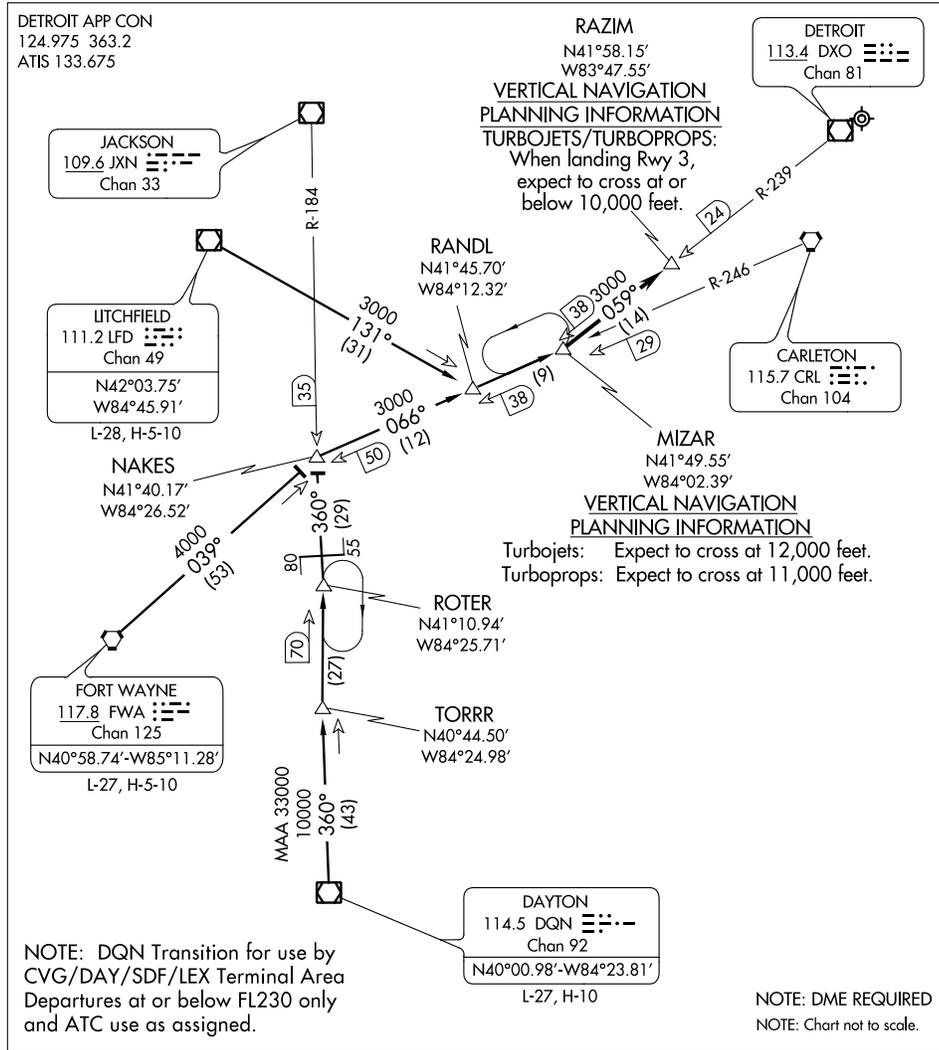
### APPENDIX 5 STAR WITH TRANSITIONS

(MIZAR.MIZAR3) 13234

## MIZAR THREE ARRIVAL

ST-119 (FAA)

DETROIT METROPOLITAN WAYNE COUNTY  
DETROIT, MICHIGAN



**DAYTON TRANSITION (DQN.MIZAR3):** From over DQN VOR/DME via DQN R-360 and JXN R-184 to NAKES INT, then via CRL VORTAC R-246 to MIZAR DME. Thence. . . .

**FORT WAYNE TRANSITION (FWA.MIZAR3):** From over FWA VORTAC via FWA R-039 to NAKES INT, then via CRL R-246 to MIZAR DME. Thence. . . .

**LITCHFIELD TRANSITION (LFD.MIZAR3):** From over LFD VOR/DME via LFD R-131 to RANDL INT, then via CRL R-246 to MIZAR DME. Thence. . . .

. . . . From over MIZAR DME via DXO VOR/DME R-239 to RAZIM DME. Expect radar vectors to final approach course.

## MIZAR THREE ARRIVAL

(MIZAR.MIZAR3) 01JAN98

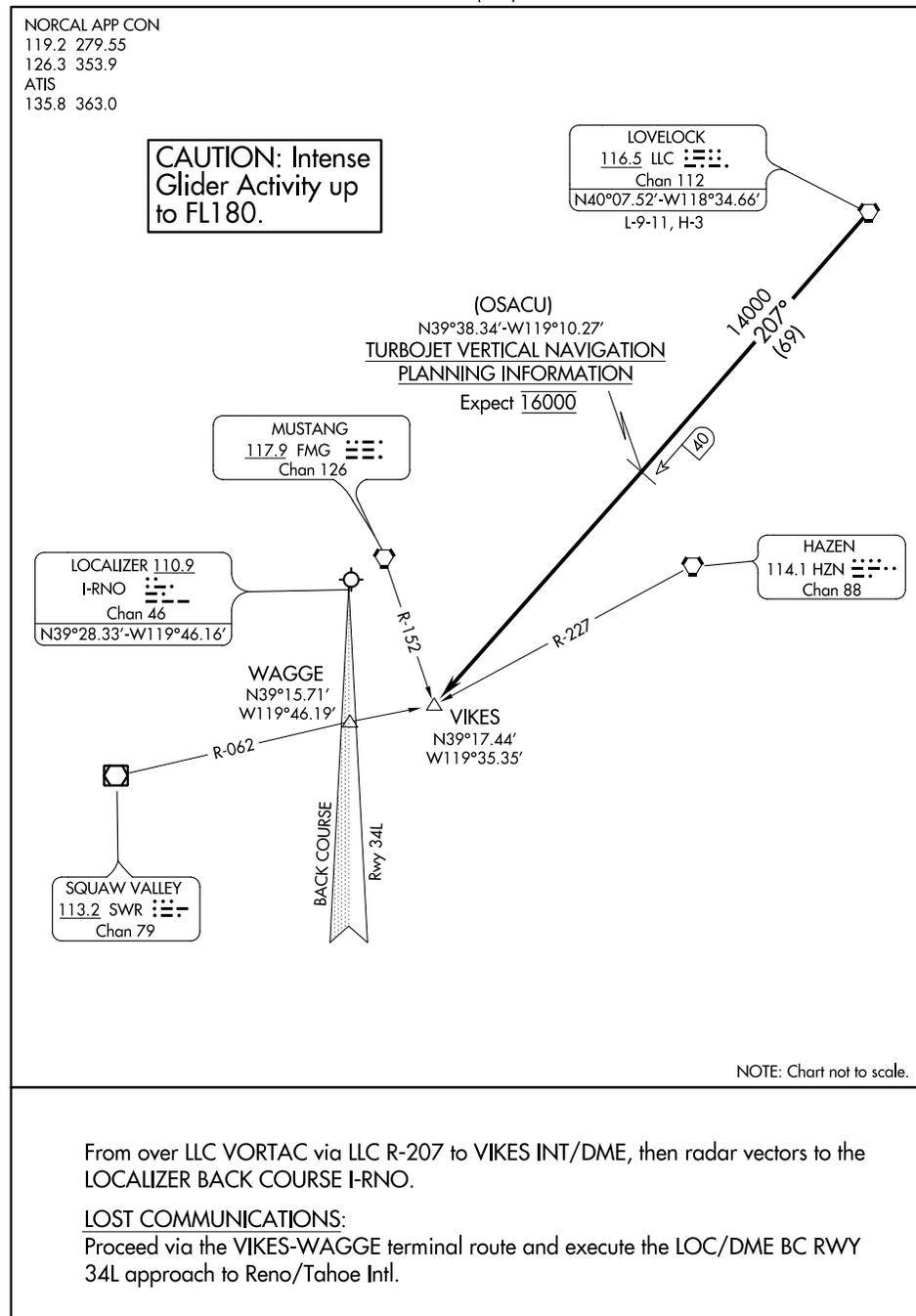
DETROIT, MICHIGAN  
DETROIT METROPOLITAN WAYNE COUNTY

### APPENDIX 6 STAR WITH ARRIVAL ONLY

(LLC.VIKES1) 12320  
**VIKES ONE ARRIVAL**

ST-346 (FAA)

RENO/TAHOE INTL  
RENO, NEVADA



**VIKES ONE ARRIVAL**  
(LLC.VIKES1) 23APR98

RENO, NEVADA  
RENO/TAHOE INTL

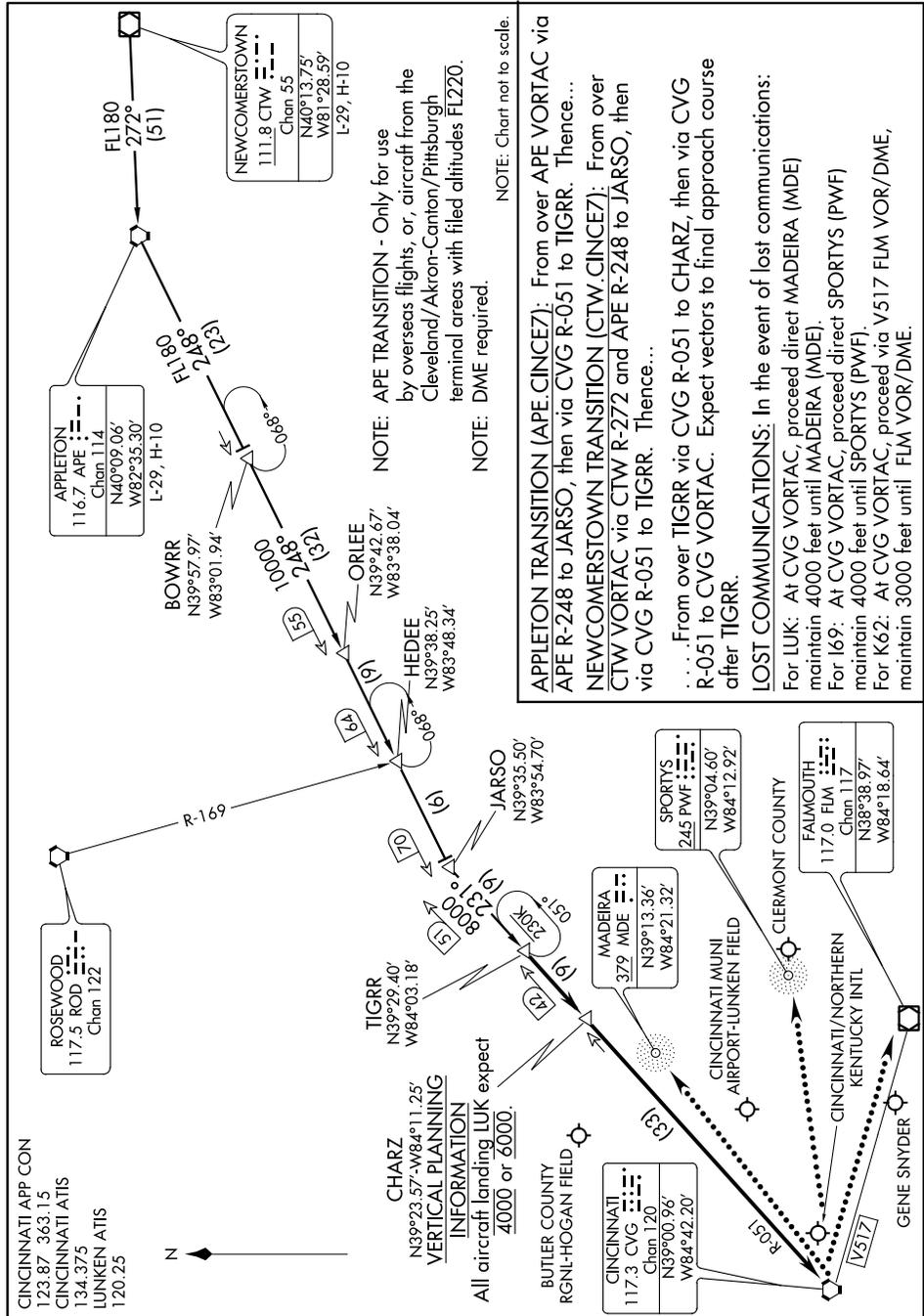
# APPENDIX 7 STAR WITH EAST-WEST ORIENTATION

(TIGRR.CINCE7) 15008

ST-655 (FAA)

## CINCE SEVEN ARRIVAL

CINCINNATI, OHIO



## CINCE SEVEN ARRIVAL

(TIGRR.CINCE7) 03APR14

CINCINNATI, OHIO

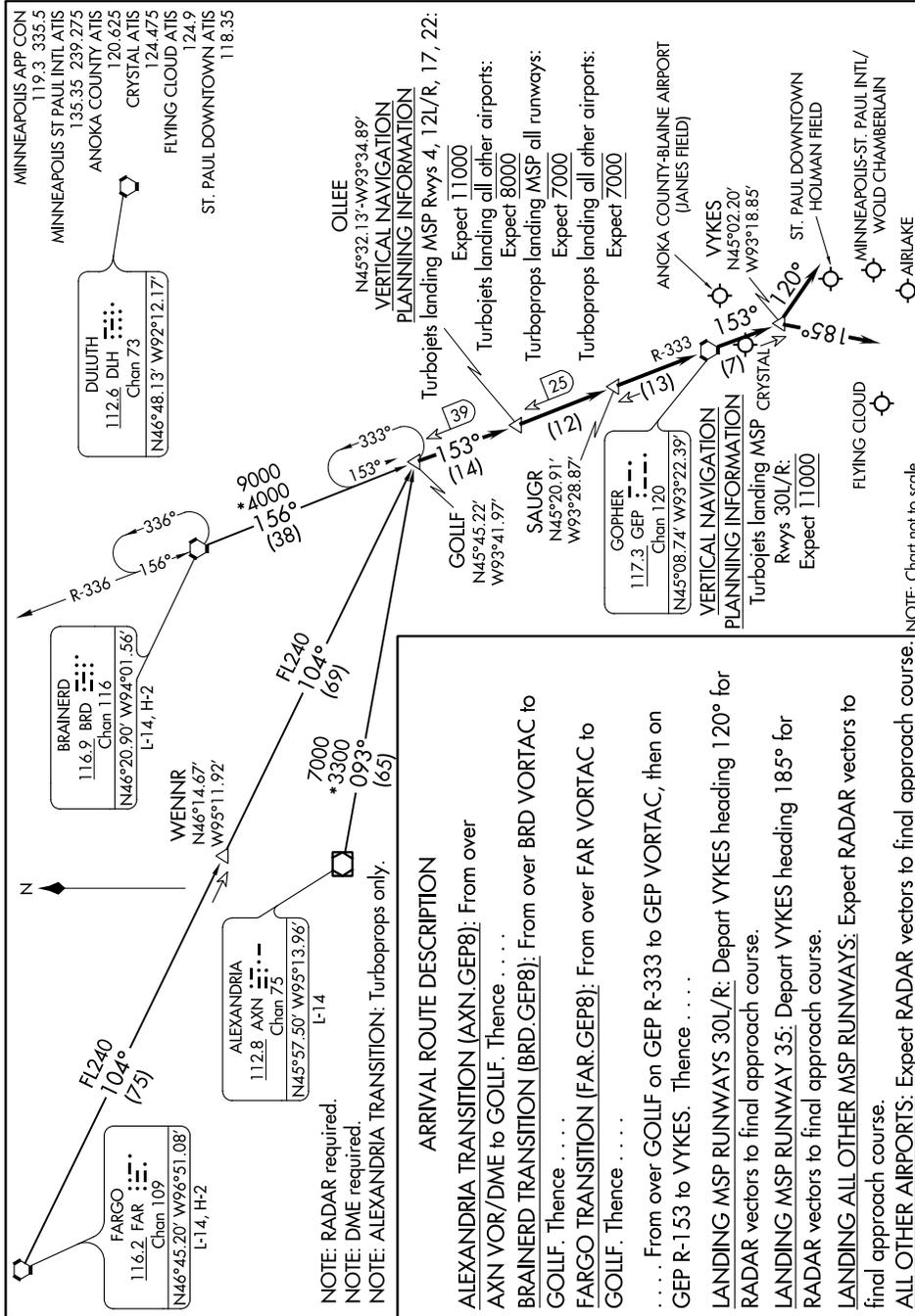
# APPENDIX 8 AREA STAR

(GEP.GEP8) 15232

## GOPHER EIGHT ARRIVAL

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA



## GOPHER EIGHT ARRIVAL

MINNEAPOLIS, MINNESOTA

(GEP.GEP8) 20AUG15

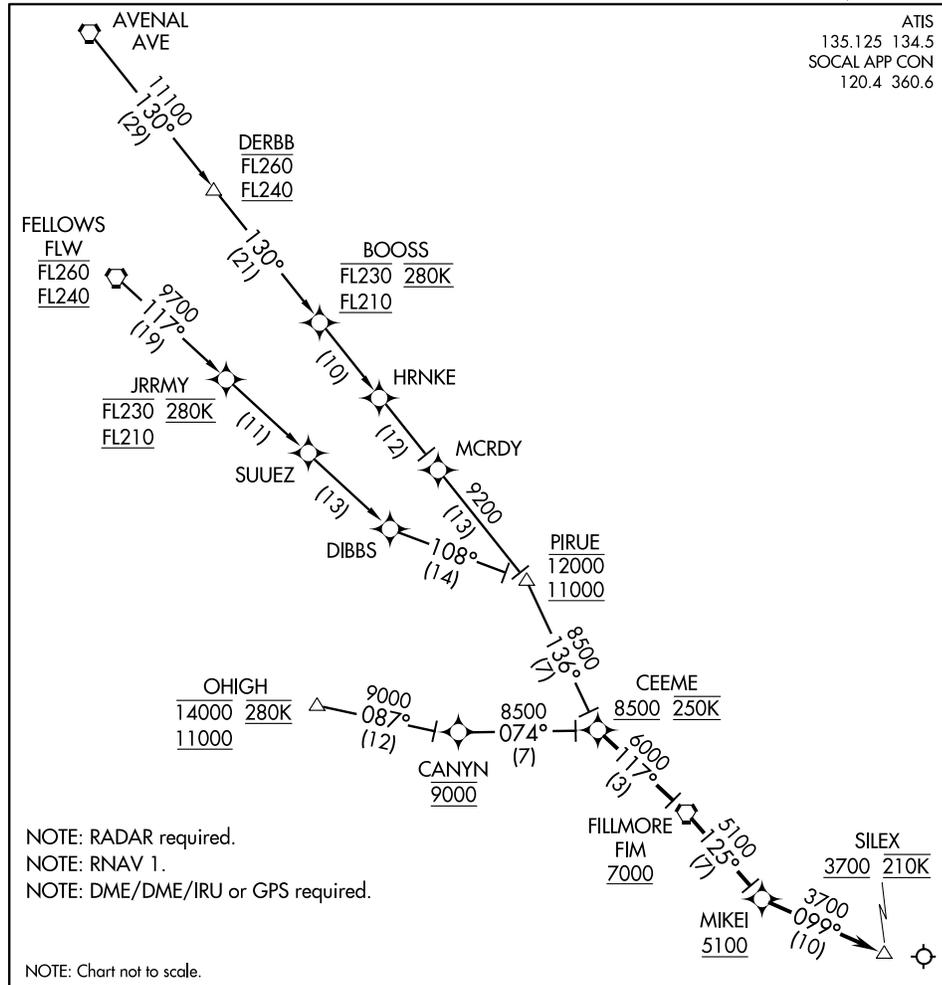
**APPENDIX 9  
RNAV STAR**

(CEEME.CEEME2) 13346

**CEEME TWO ARRIVAL (RNAV)** ST-67 (FAA)

**BOB HOPE (BUR)**  
BURBANK, CALIFORNIA

ATIS  
135.125 134.5  
SOCAL APP CON  
120.4 360.6



**ARRIVAL ROUTE DESCRIPTION**

AVENAL TRANSITION (AVE.CEEME2)

DERBB TRANSITION (DERBB.CEEME2)

FELLOWS TRANSITION (FLW.CEEME2)

OHIGH TRANSITION (OHIGH.CEEME2)

From CEEME on track 117° to cross FIM VORTAC at/above 7000, then on track 125° to cross MIKEI at/above 5100, on track 099° to cross SILEX at/above 3700 and at 210K. Expect ILS or LOC Z RWY 8 approach.

**LOST COMMUNICATIONS**

Join the Burbank ILS or LOC Z RWY 8 approach at SILEX.

**CEEME TWO ARRIVAL (RNAV)**

(CEEME.CEEME2) 12DEC13

BURBANK, CALIFORNIA  
BOB HOPE (BUR)



**APPENDIX 10**  
**STAR WITH CONTINUED PAGE (CONTINUED)**

(BARET.BARET5) 15008

ST-373 (FAA)

**BARET FIVE ARRIVAL**

SAN DIEGO, CALIFORNIA

ARRIVAL ROUTE DESCRIPTION

IMPERIAL TRANSITION (IPL.BARET5): From over IPL VORTAC on IPL R-258 and MZB R-076 to BARET INT. Thence . . . .

NEEDLES TRANSITION (EED.BARET5): From over EED VORTAC on EED R-208 to SHADI INT, then on JLI R-040 to SALTN INT, then on PGY R-027 to CARUL INT, then on JLI R-177 to BARET INT. Thence . . . .

PARKER TRANSITION (PKE.BARET5): From over PKE VORTAC on PKE R-227 to SHADI INT, then on JLI R-040 to SALTN INT, then on PGY R-027 to CARUL INT, then on JLI R-177 to BARET INT. Thence . . . .

TWENTYNINE PALMS TRANSITION (TNP.BARET5): From over TNP VORTAC on TNP R-179 to MOMAR INT, then on JLI R-040 to SALTN INT, then on PGY R-027 to CARUL INT, then on JLI R-177 to BARET INT. Thence . . . .

. . . .LANDING SAN RWY 9: From BARET INT on PGY R-043 to PGY VORTAC, then on PGY R-270 to IFSOX, then on OCN R-162 to SARGS INT. Expect ILS Rwy 9 approach to SAN or LOC/DME-B to NZY.

. . . .LANDING SAN RWY 27 and NZY: From BARET INT on PGY R-043 to IFHEJ, then on I-UBR localizer to VYDDA INT. Expect LOC Rwy 27 approach to SAN or LOC/DME-A to NZY.

LOST COMMUNICATIONS: In the event of lost communications, North Island arrivals shall execute the TACAN Rwy 29 or TACAN Rwy 36.

**BARET FIVE ARRIVAL**

SAN DIEGO, CALIFORNIA

(BARET.BARET5) 08JAN15

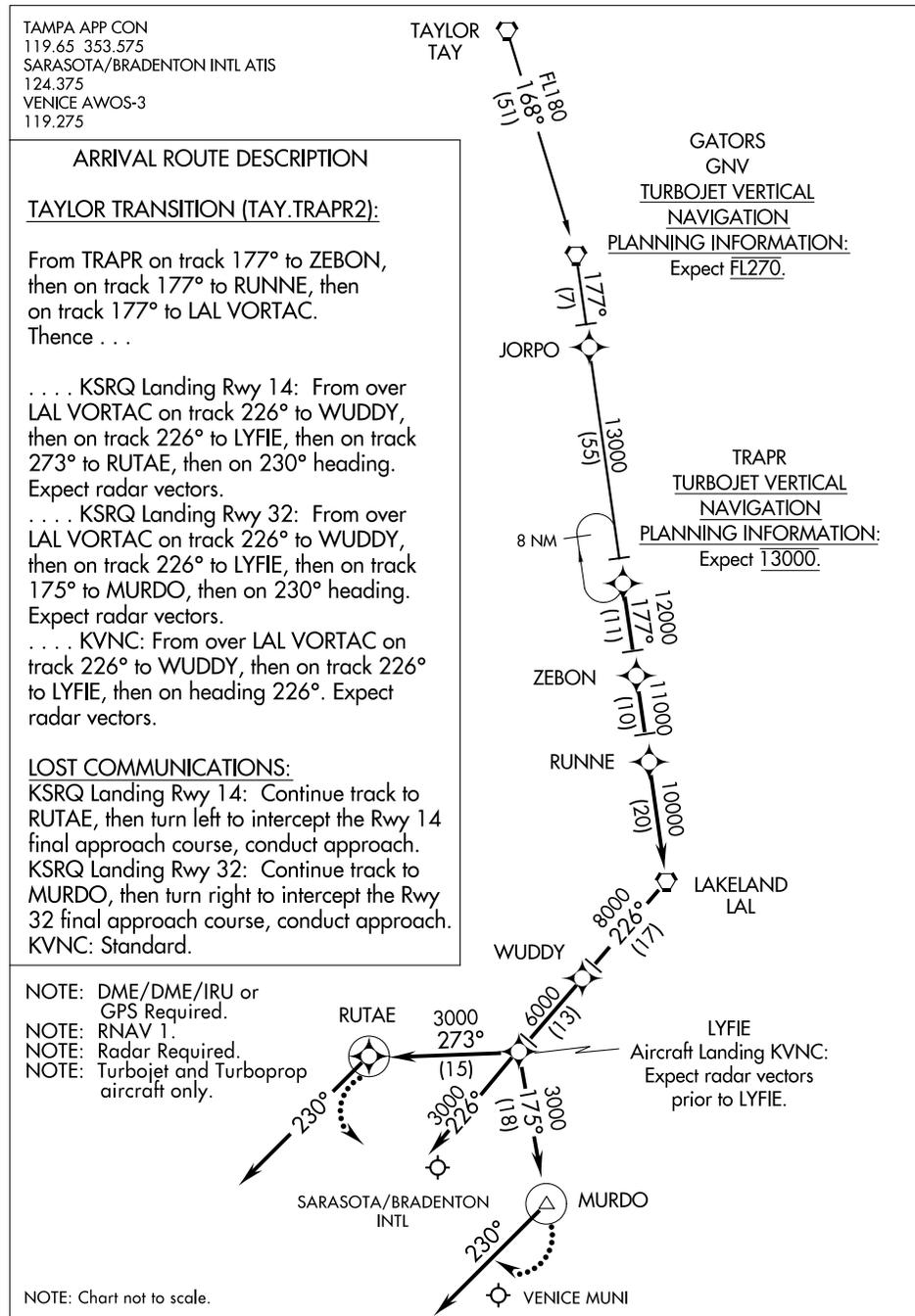
### APPENDIX 11 STAR WITH OFFSET TEXT BOX

(TRAPR.TRAPR2) 13178

ST-640 (FAA)

**TRAPR TWO ARRIVAL (RNAV)**

SARASOTA/BRADENTON, FLORIDA



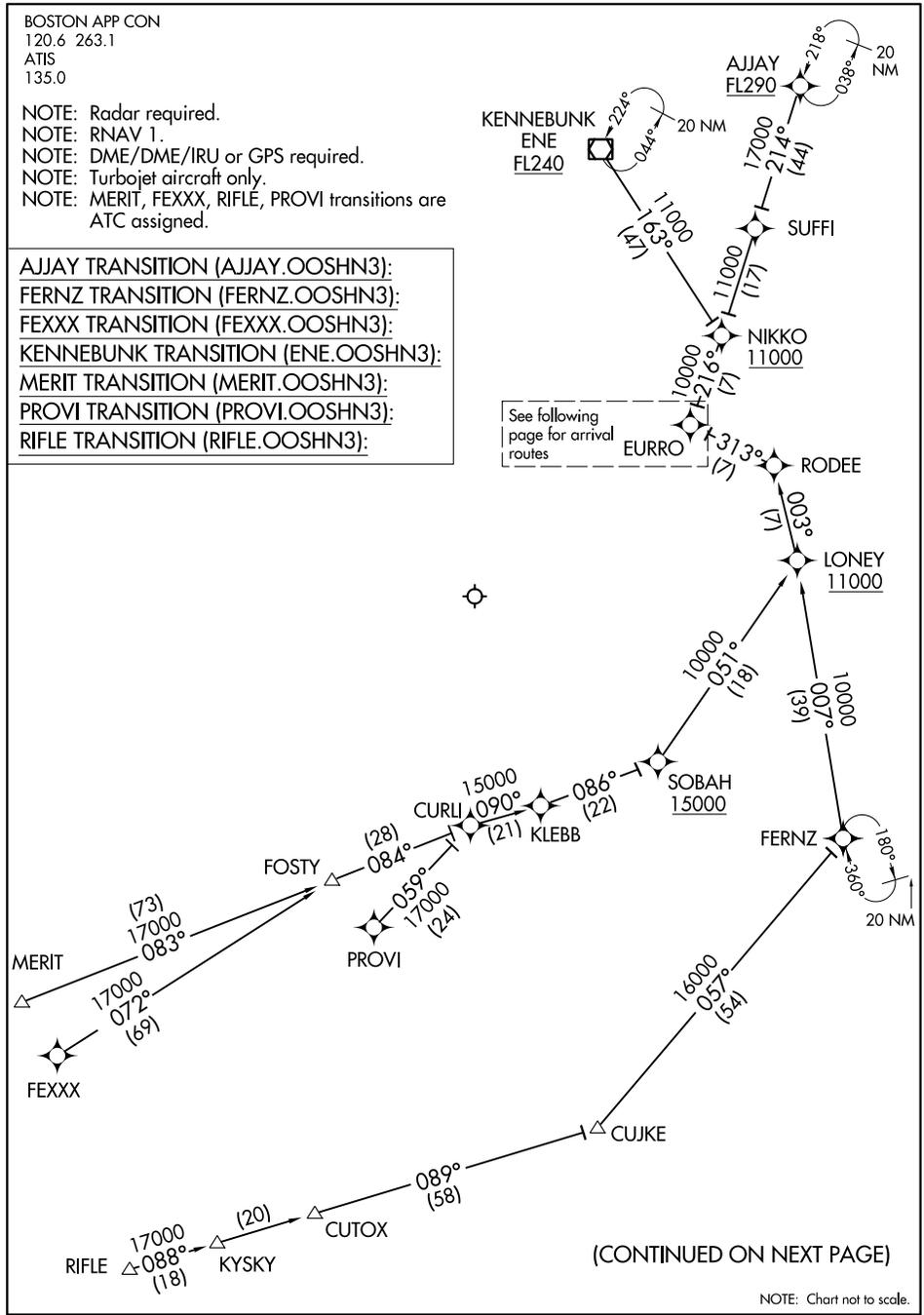
**TRAPR TWO ARRIVAL (RNAV)**

SARASOTA/BRADENTON, FLORIDA

(TRAPR.TRAPR2) 05MAY11

### APPENDIX 12 MULTIPLE GRAPHIC STAR (2 PAGES)

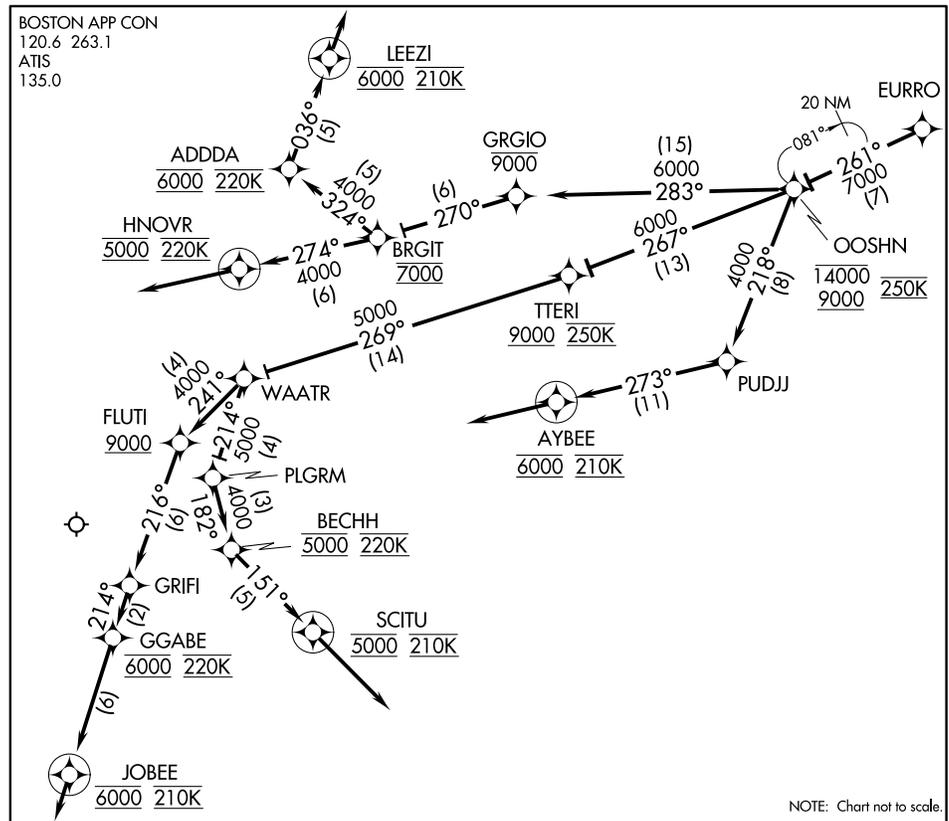
(EURO.OOSH3) 14317 ST-58 (FAA)  
GENERAL EDWARD LAWRENCE LOGAN INTL (BOS)  
**OOSH3 THREE ARRIVAL (RNAV) Transition Routes** BOSTON, MASSACHUSETTS



**OOSH3 THREE ARRIVAL (RNAV) Transition Routes** BOSTON, MASSACHUSETTS  
(EURO.OOSH3) 13NOV14 GENERAL EDWARD LAWRENCE LOGAN INTL (BOS)

**APPENDIX 12  
MULTIPLE GRAPHIC STAR (2 PAGES) (CONTINUED)**

(EURRO.OOSH3) 14317 ST-58 (FAA) GENERAL EDWARD LAWRENCE LOGAN INTL (BOS)  
**OOSH3 THREE ARRIVAL (RNAV) Arrival Routes** BOSTON, MASSACHUSETTS



**ARRIVAL ROUTE DESCRIPTION**

From over EURRO on track 261° to cross OOSH3 between 9000 and 14000 and at 250K.

Landing Rwy 4L/R: From OOSH3 on track 267° to cross TTER1 at or above 9000 and at 250K, then on track 269° to WAATR, then on track 241° to cross FLUTI at or above 9000, then on track 216° to GRIFI, then on track 214° to cross GGABE at 6000 and at 220K, then on track 214° to cross JOBEE at 6000 and at 210K, then on track 214°. Expect radar vectors to final approach course.

Landing Rwy 15R: From OOSH3 on track 283° cross GRGIO at or below 9000, then on track 270° to cross BRGIT at 7000, then on track 274° to cross HNOVR at 5000 and at 220K, then on track 274°. Expect radar vectors to final approach course.

Landing Rwy 22L/R: From OOSH3 on track 283° to cross GRGIO at or below 9000, then on track 270° to cross BRGIT at 7000, then on track 324° to cross ADDDA at 6000 and at 220K, then on track 036° to cross LEEZI at 6000 and at 210K, then on track 036°. Expect radar vectors to final approach course.

Landing Rwy 27: From OOSH3 on track 218° to PUDJJ, then on track 273° to cross AYBEE at 6000 and at 210K, then on track 273°. Expect radar vectors to final approach course.

Landing Rwy 32, 33L: From OOSH3 on track 267° to cross TTER1 at or above 9000 at 250K, then on track 269° to WAATR, then on track 214° to PLGRM, then on track 182° to cross BECHH at 5000 and at 220K, then on track 151° to cross SCITU at 5000 and at 210K, then on track 151°. Expect radar vectors to final approach course.

**OOSH3 THREE ARRIVAL (RNAV) Arrival Routes** BOSTON, MASSACHUSETTS  
 (EURRO.OOSH3) 13NOV14 GENERAL EDWARD LAWRENCE LOGAN INTL (BOS)

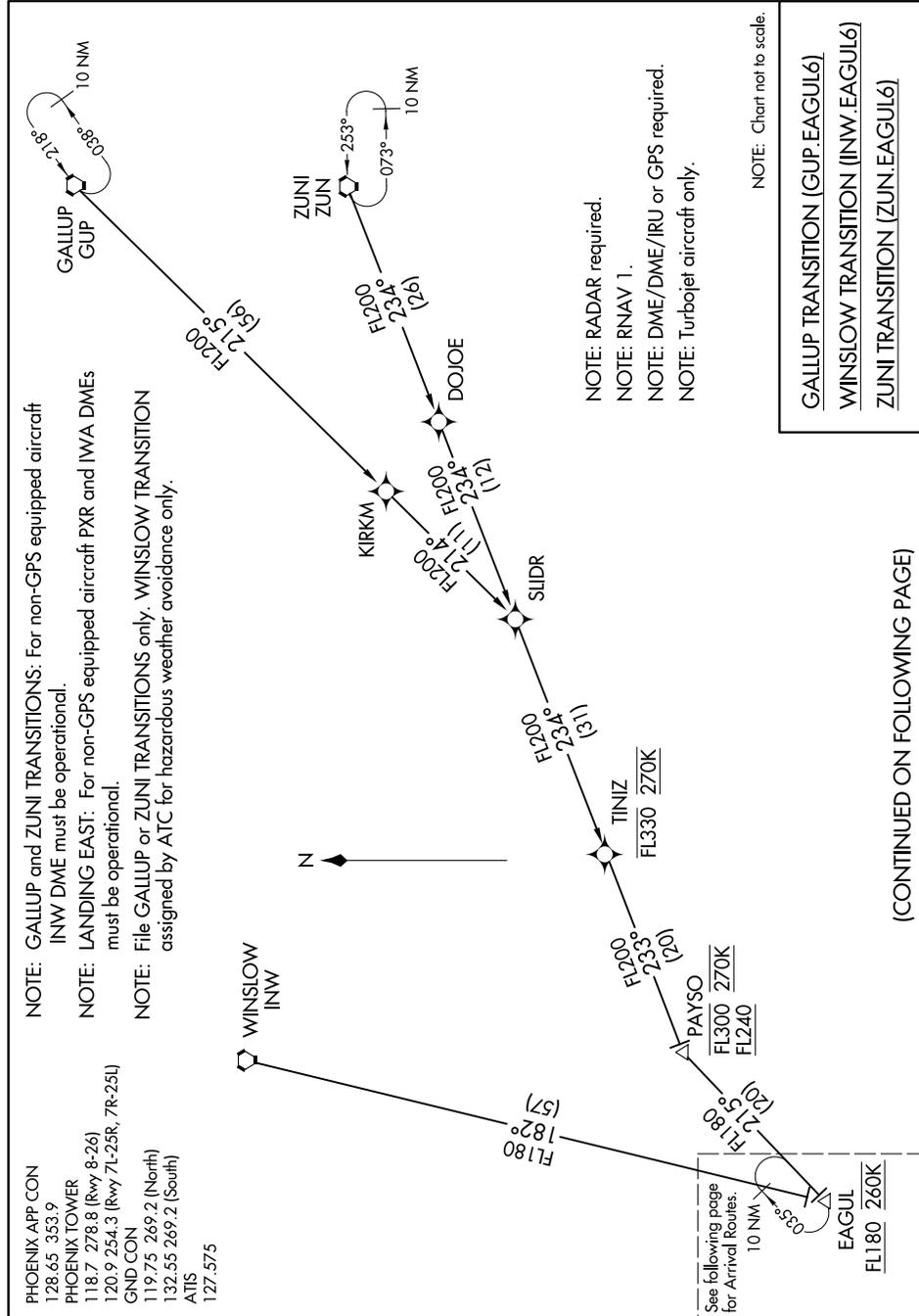
APPENDIX 13  
 MULTIPLE GRAPHIC STAR (3 PAGES)

(EAGUL.EAGUL6) 14261

ST-322 (FAA)

PHOENIX SKY HARBOR INTL (PHX)  
 PHOENIX, ARIZONA

EAGUL SIX ARRIVAL (RNAV) Transition Routes



EAGUL SIX ARRIVAL (RNAV) Transition Routes

(EAGUL.EAGUL6) 18SEP14

PHOENIX, ARIZONA  
 PHOENIX SKY HARBOR INTL (PHX)

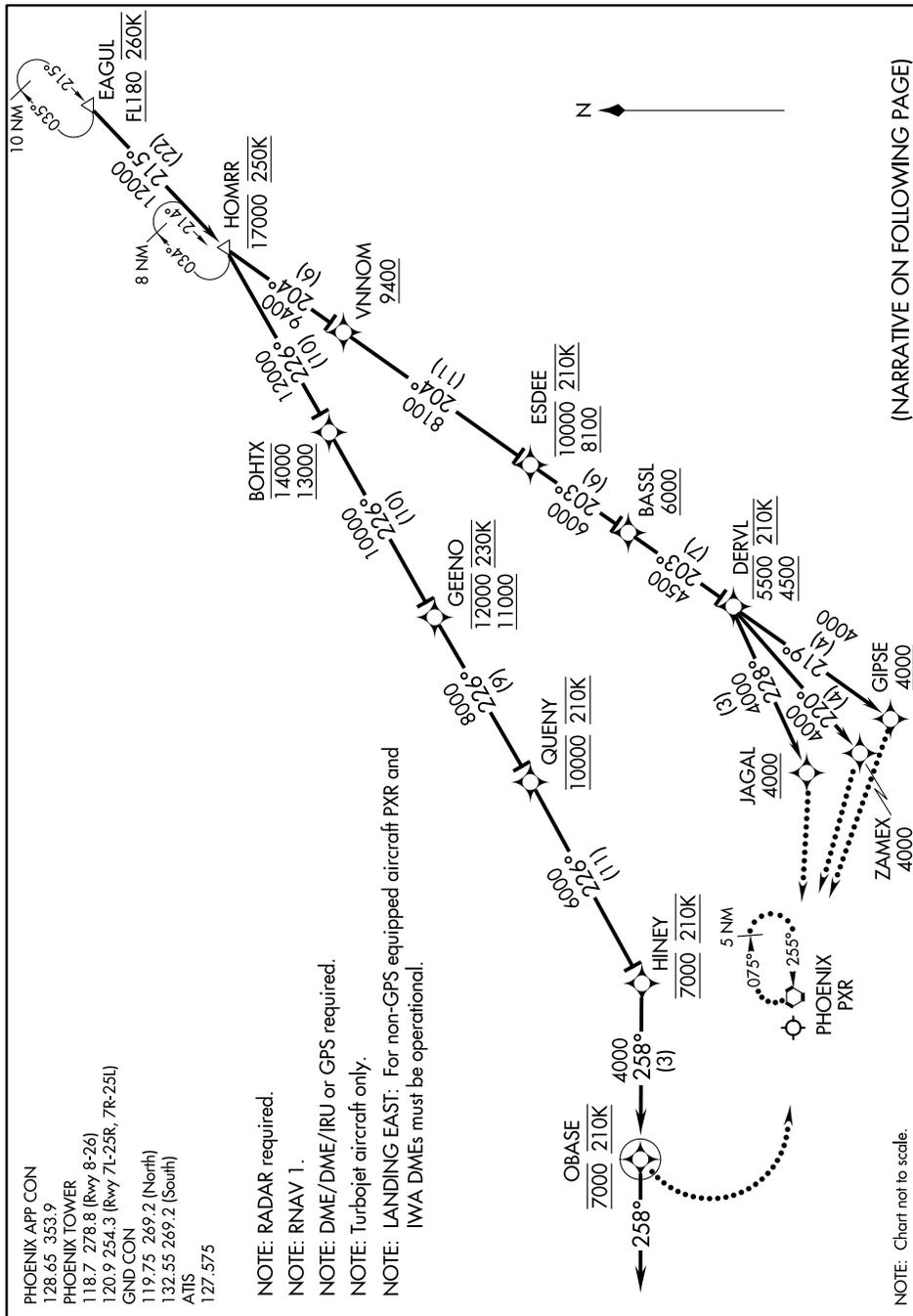
APPENDIX 13  
MULTIPLE GRAPHIC STAR (3 PAGES) (CONTINUED)

(EAGUL.EAGUL6) 14261

ST-322 (FAA)

EAGUL SIX ARRIVAL (RNAV) Arrival Routes

PHOENIX SKY HARBOR INTL (PHX)  
PHOENIX, ARIZONA



(NARRATIVE ON FOLLOWING PAGE)

EAGUL SIX ARRIVAL (RNAV) Arrival Routes

PHOENIX, ARIZONA  
PHOENIX SKY HARBOR INTL (PHX)

(EAGUL.EAGUL6) 18SEP14

**APPENDIX 13**  
**MULTIPLE GRAPHIC STAR (3 PAGES) (CONTINUED)**

(EAGUL.EAGUL6) 14261

ST-322 (FAA)

PHOENIX SKY HARBOR INTL (PHX)  
PHOENIX, ARIZONA**EAGUL SIX ARRIVAL (RNAV)**

## ARRIVAL ROUTE DESCRIPTION

From EAGUL on track 215° to cross HOMRR at or below 17000 at 250K.

LANDING RUNWAYS 7L, 7R, 8: From HOMRR on track 226° to cross BOHTX at/above 13000 and at/below 14000, then on track 226° to cross GEENO at/above 11000 and at/below 12000 and at 230K, then on track 226° to cross QUENY at 10000 and at 210K, then on track 226° to cross HINEY at 7000 and at 210K, then on track 258° to cross OBASE at 7000 and at 210K, then on track 258°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 25L: From HOMRR on track 204° to cross VNNOM at/above 9400, then on track 204° to cross ESDEE at/above 8100 and at/below 10000 and at 210K, then on track 203° to cross BASSL at/above 6000, then on track 203° to cross DERVL at/above 4500 and at/below 5500 and at 210K, then on track 219° to cross GIPSE at/above 4000. Expect ILS or LOC RWY 25L approach or RADAR vectors to final approach course.

LANDING RUNWAY 25R: From HOMRR on track 204° to cross VNNOM at/above 9400, then on track 204° to cross ESDEE at/above 8100 and at/below 10000 and at 210K, then on track 203° to cross BASSL at/above 6000, then on track 203° to cross DERVL at/above 4500 and at/below 5500 and at 210K, then on track 220° to cross ZAMEX at/above 4000. Expect RNAV (GPS) Y RWY 25R approach or RADAR vectors to final approach course.

LANDING RUNWAY 26: From HOMRR on track 204° to cross VNNOM at/above 9400, then on track 204° to cross ESDEE at/above 8100 and at/below 10000 and at 210K, then on track 203° to cross BASSL at/above 6000, then on track 203° to cross DERVL at/above 4500 and at/below 5500 at 210K, then on track 228° to cross JAGAL at/above 4000. Expect ILS or LOC RWY 26 approach or RADAR vectors to final approach course.

**LOST COMMUNICATIONS**

LANDING RUNWAY 7L: After OBASE turn left, intercept and execute RWY 7L ILS approach. If unable, proceed direct PXR VORTAC and hold, maintain 9000.

LANDING RUNWAY 7R: After OBASE turn left, intercept and execute RWY 7R ILS approach. If unable, proceed direct PXR VORTAC and hold, maintain 9000.

LANDING RUNWAY 8: After OBASE turn left, intercept and execute RWY 8 ILS approach. If unable, proceed direct PXR VORTAC and hold, maintain 9000.

LANDING RUNWAY 25L: At GIPSE, intercept and execute RWY 25L ILS approach. If unable, proceed direct PXR VORTAC and hold, maintain 9000.

LANDING RUNWAY 25R: At ZAMEX, intercept and execute RWY 25R RNAV (GPS) approach. If unable, proceed direct PXR VORTAC and hold, maintain 9000.

LANDING RUNWAY 26: At JAGAL, intercept and execute RWY 26 ILS approach. If unable, proceed direct PXR VORTAC and hold, maintain 9000.

**EAGUL SIX ARRIVAL (RNAV)**

(EAGUL.EAGUL6) 18SEP14

PHOENIX, ARIZONA  
PHOENIX SKY HARBOR INTL (PHX)

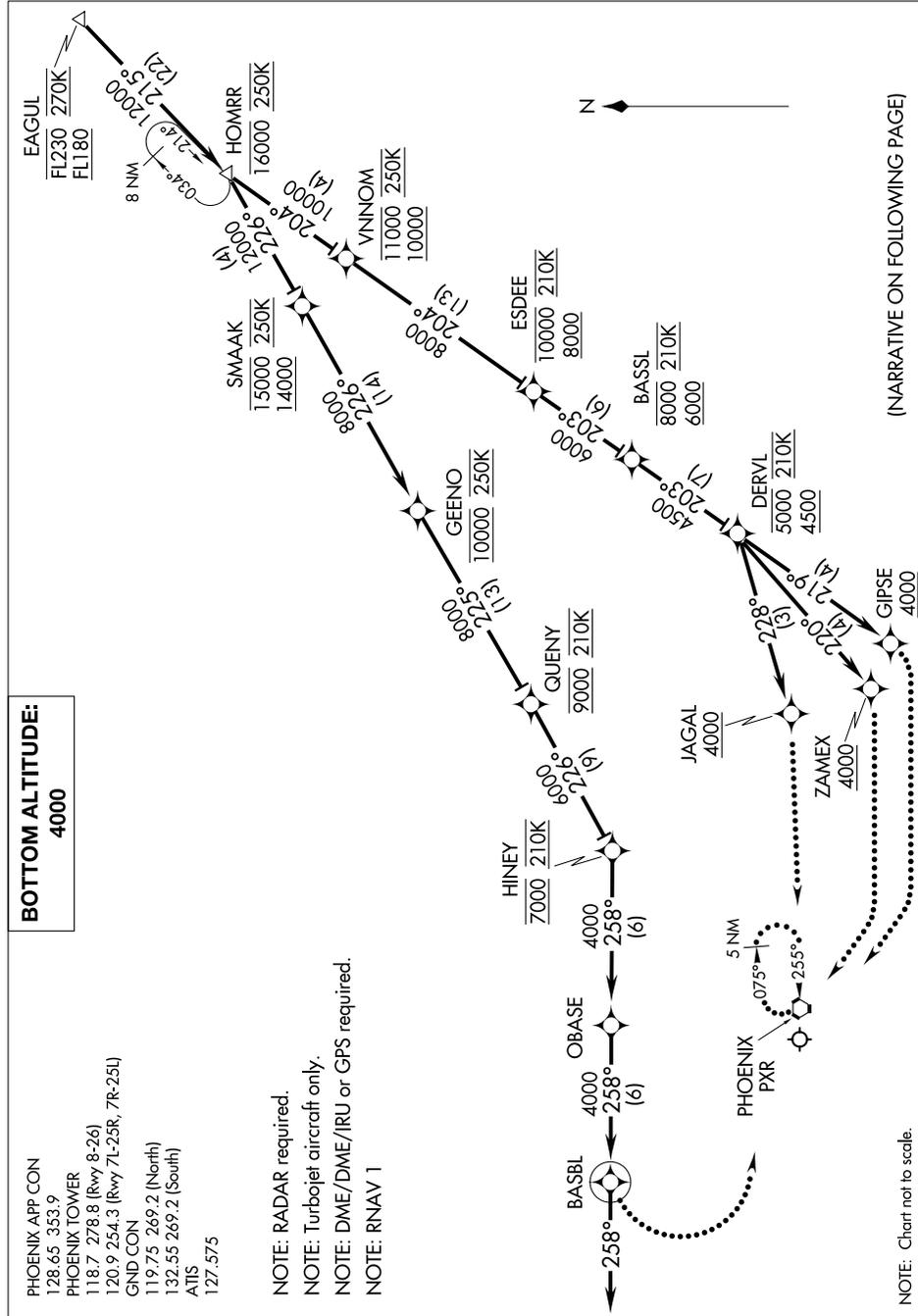
**APPENDIX 14**  
**STAR WITH SINGLE BOTTOM ALTITUDE NOTE**

(EAGUL.EAGUL5) 00000

ST-322 (FAA)

**EAGUL FIVE ARRIVAL (RNAV) Arrival Routes**

PHOENIX SKY HARBOR INTL  
PHOENIX, ARIZONA



**EAGUL FIVE ARRIVAL (RNAV) Arrival Routes**

(EAGUL.EAGUL5) 00XXXX

PHOENIX, ARIZONA  
PHOENIX SKY HARBOR INTL

**APPENDIX 15  
STAR WITH MULTIPLE BOTTOM ALTITUDE NOTES**

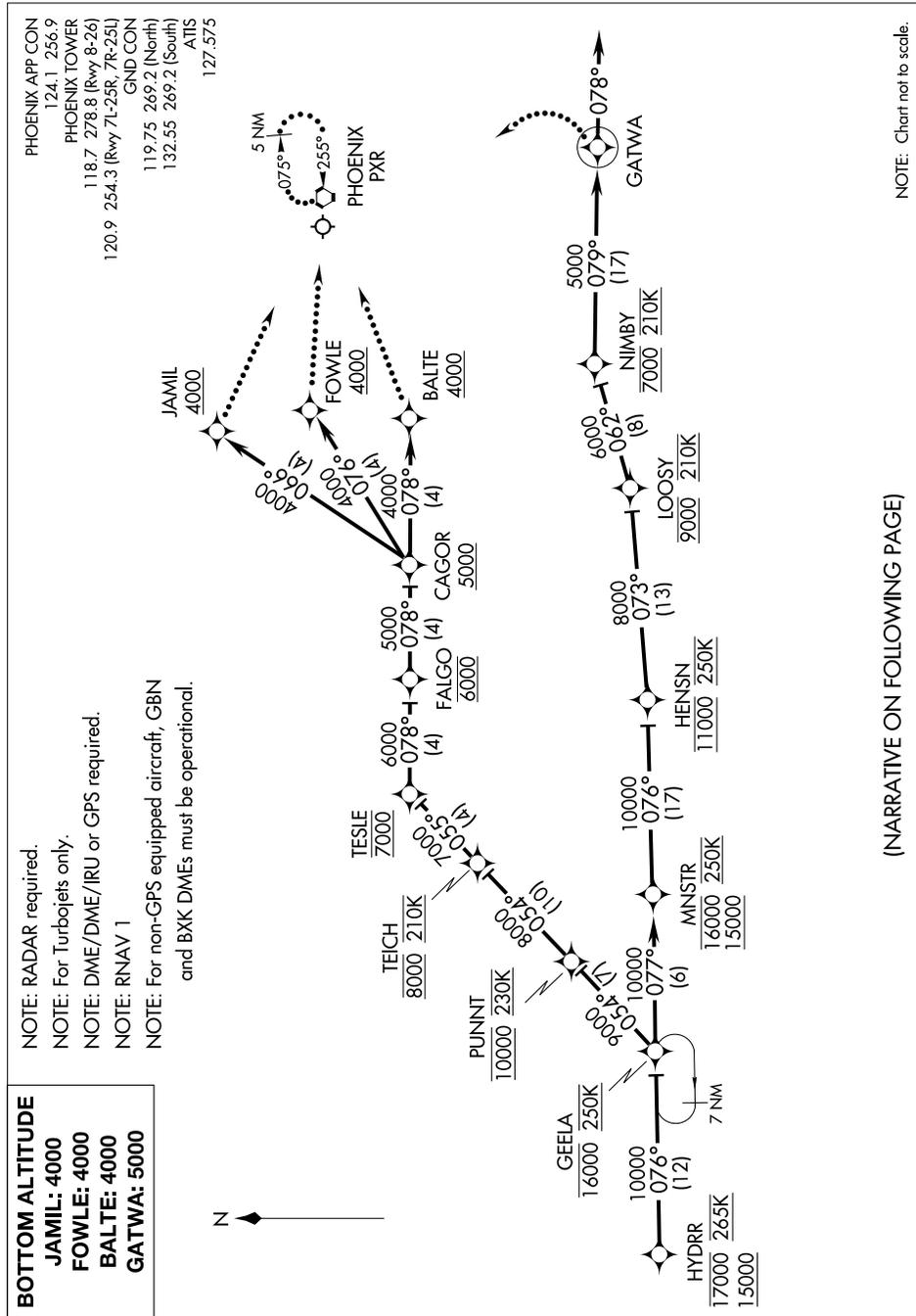
(GEELA.GEELA6) 00000

ST-322 (FAA)

**GEELA SIX ARRIVAL (RNAV)**

Arrival Routes

PHOENIX SKY HARBOR INTL  
PHOENIX, ARIZONA



**BOTTOM ALTITUDE**  
**JAMIL: 4000**  
**FOWLE: 4000**  
**BALTE: 4000**  
**GATWA: 5000**

NOTE: RADAR required.  
 NOTE: For Turboprops only.  
 NOTE: DME/DME/IRU or GPS required.  
 NOTE: RNAV 1  
 NOTE: For non-GPS equipped aircraft, GBN and BXK DMEs must be operational.

**GEELA SIX ARRIVAL (RNAV)**

Arrival Routes

(GEELA.GEELA6) 00XXXX00

PHOENIX, ARIZONA  
PHOENIX SKY HARBOR INTL

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

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