

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.

<u>AIRPORT ID</u> SMQ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> SOMERVILLE	<u>STATE</u> NJ
<u>AIRPORT ELEVATION</u> 106	<u>TDZE</u> 104	<u>SUPERSEDED</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 11/05/2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 26 DECEMBER 2024	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 13W
				<u>EPOCH YEAR</u> 2000
				<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
DIRPE		AVETE		TF	FB	1.00	031.76	8.44	3000
ARMMS		BOMTE		TF	FB	1.00	228.41	15.91	3000
METRO		AVETE		TF	FB	1.00	325.35	16.37	3000
AVETE	IAF	RATEE		TF	FB	1.00	031.80	5.00	2800
BOMTE	IAF	RATEE		TF	FB	1.00	211.84	5.00	2800
RATEE	IF	NEMOE		TF	FB	1.00	121.83	4.98	2100
NEMOE	FAF	HEBAR/2.28 NM TO RW12		TF	FB	0.30	121.89	3.53	
HEBAR/2.28 NM TO RW12		RW12	MAP	TF	FO	0.30	121.89	2.28	
RW12	MAP	506 MSL		CA			121.89		
506 MSL		SBJ VOR/DME		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LNAV: RW12

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 2500 DIRECT SBJ VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 2500.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)
2. PROFILE STARTS AT RATEE
3. FAC: 121.89

FAF: NEMOE

DIST FAF TO MAP: 5.82

DIST FAF TO THLD: 5.82
4. MIN ALT: RATEE 2800, NEMOE 2100, HEBAR/2.28 NM TO RW12 900
5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

GS ANT:
6. MIN GP INCPT:

GP ALT AT FAF:

OM:

MM:

IM:
7. GP ANGLE:

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH:
8. MSA FROM: RW12 2900



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DIRPE ON V403 WESTBOUND.
CHART NOTE: CIRCLING RWY 8, 17, 26, 30 AND 35 NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ARMMS ON V252 NORTHBOUND.

ADDITIONAL FLIGHT DATA:

HOLD S, RT, 018.88 INBOUND.
CHART FAS OBST: 340 TOWER (34-068196) 403838N/0744145W.
985 AAO 404139N/0744709W.
CHART VDP AT 1.64 NM TO RW12.
CHART CIRCLING ICON.
NEMOE TO RW12: 3.20/40.

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT B 900-2, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	640	1	536	640	1	536		NA			NA				
CIRCLING	640	1	534	960	1 1/4	854		NA			NA				

CHANGES - REASONS

1. TERMINAL ROUTES: SEGMENT RATEE TO NEMOE, COURSE CHANGED FROM "121.82" TO "121.83" AND DISTANCE CHANGED FROM "5.00" TO "4.98" - FAF MOVED/REMOVED 20:1 PENETRATIONS.
2. TERMINAL ROUTES: SEGMENT NEMOE TO HEBAR, CHANGED HEBAR FROM "1.75 NM TO RW12" TO "2.28 NM FROM RW12" CHANGED DISTANCE FROM "4.05" TO "3.53" - REALIGNED SDF HEBAR/20:1 PENETRATIONS REMOVED.
3. TERMINAL ROUTES: SEGMENT HEBAR TO RW12, CHANGED DISTANCE FROM "1.75" TO "2.28" - HEBAR MOVED.
4. PROFILE LINE 3: DIST FAF TO MAP AND DIST FAF TO THLD CHANGED FROM "5.80" TO "5.82" - REALIGNED GLIDESLOPE FROM 3.21 TO 3.20/FAF MOVED.
5. PROFILE LINE 7: CHANGED FROM "20:1 IS NOT CLEAR" TO "20:1 IS CLEAR" - AIRPORT HAD TREES TOPPED/NO PENETRATIONS.
6. PBN REQUIREMENTS NOTE: CHANGED FROM "RNP APCH" TO "RNP APCH-GPS" - 8260.19I PARA 8-6-8 B(2).
7. REMOVED "CHART NOTE: PROCEDURE NA AT NIGHT" - NO 20:1 PENETRATIONS.
8. CHANGED CHART NOTE FROM "RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" TO "RWY 12 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - NO 20:1 PENETRATIONS.
9. NOTES: ADDED "CHART NOTE: CIRCLING RWY 8, 17, 26, 30 AND 35 NA AT NIGHT" - 20:1 PENETRATIONS EXIST AT THOSE RUNWAYS.
10. ADDITIONAL FLIGHT DATA: ADDED SURVEY ID TO "CHART FAS OBST: 340 TOWER (34-068196) 403838N/0744145W" - PER CURRENT CRITERIA.
11. ADDITIONAL FLIGHT DATA: CHANGED 7:1 OBSTACLE FROM "878 AAO 404111N/0744722W" TO "985 AAO 404139N/0744709W" - NEW TERRAIN EVALUATION.
12. ADDITIONAL FLIGHT DATA: ADDED "CHART VDP AT 1.64 NM TO RW12" - 20:1 PENETRATIONS REMOVED.
13. ADDITIONAL FLIGHT DATA: REMOVED "VISUAL SEGMENT OBSTACLES" - 20:1 PENETRATIONS REMOVED.
14. ADDITIONAL FLIGHT DATA: ADDED "NEMOE TO RW12: 3.20/40" - ADDED VDP/NO 20:1S.



COORDINATED WITH:

A4A

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ALPA

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AOPA

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APA

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HAI

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NBAA

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OTHER: ZNY, NEW YORK APP CON, AMGR

FLIGHT CHECKED BY

JEREMY R VIRTIS

Digitally signed by

CASIMIR L TABAKA

Oct 28, 2024

OFFICE

AJF

DATE

10/18/2024

DEVELOPED BY

APRIL SARMENTO

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APRIL T SARMENTO

Aug 13, 2024

OFFICE

AJV-A432

DATE

07/22/2024

APPROVED BY

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CASIMIR L TABAKA

Oct 28, 2024

OFFICE

AJV-A432

DATE

TITLE

MANAGER

