

**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.

AIRPORT ID PHL	PROCEDURE NAME RNAV (GPS) RWY 27L	ORIGINAL/AMENDMENT 4	CITY PHILADELPHIA	STATE PA
AIRPORT ELEVATION 36	TDZE 10	SUPERSEDED RNAV (GPS) RWY 27L	DATED 05/24/2018	MAG VAR 12W
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 25 JANUARY 2024	REQUIRED EFFECTIVE DATE ROUTINE	EPOCH YEAR 2020
			CANCEL/SUSPEND	

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
CHPMN	IAF	HEDDA		TF	FB	1.00	075.39	8.00	5000
HEDDA		WIWON		TF	FB	1.00	075.49	5.47	5000
WIWON		FLYNN		TF	FB	1.00	074.74	3.04	5000
FLYNN		PUURL		TF	FB	1.00	355.64	4.20	5000
PUURL		HILBY		TF	FB	1.00	307.66	3.30	5000
HILBY	IF	ORANE		TF	FB	1.00	267.75	3.64	4600
ORANE		FESTI		TF	FB	1.00	267.69	3.11	3700
FESTI		TORNE		TF	FB	1.00	267.64	2.48	3000
TORNE	FAF	GLOUS/6.30 NM TO RW27L		TF	FB	0.30	267.61	2.90	
GLOUS/6.30 NM TO RW27L		RW27L	MAP	TF	FO	0.30	267.61	6.30	
RW27L	MAP	500 MSL		CA			267.61		500
500 MSL		WUDRR		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW27L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 500 THEN CLIMBING LEFT TURN TO 3000 DIRECT WUDRR AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

- | | | | | | | | | | | | | | | | |
|--------------|---|-----------------|----------------------------------|-----------------|------------------------------|--|-------------------------------|--|----------------------|--|----------------|--|--|------------|--|
| 1. PT | SIDE OF COURSE | OUTBOUND | FT WITHIN | MILES OF | (IAF) | | | | | | | | | | |
| 2. | PROFILE STARTS AT HILBY | | | | | | | | | | | | | | |
| 3. | FAC: 267.61 | | FAF: TORNE | | DIST FAF TO MAP: 9.21 | | DIST FAF TO THLD: 9.21 | | | | | | | | |
| 4. | MIN ALT: HILBY 5000, ORANE 4600, FESTI 3700, TORNE 3000, GLOUS/6.30 NM TO RW27L 2060 | | | | | | | | | | | | | | |
| 5. | DIST TO THLD FROM OM: | | MM: | | IM: | | 150 HAT: | | 200 HAT: 0.45 | | GS ANT: | | | | |
| 6. | MIN GP INCPT: 3000 | | GP ALT AT FAF: TORNE 3000 | | | | | | OM: | | MM: | | | IM: | |
| 7. | GP ANGLE: 3.00 | | 34:1: IS CLEAR | | 20:1: IS CLEAR | | TCH: 57.2 | | | | | | | | |
| 8. | MSA FROM: RW27L 2600 | | | | | | | | | | | | | | |

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART PROFILE NOTE: VGS1 AND RNAV GLIDEPATH NOT COINCIDENT (VGS1 ANGLE {ANGLE}/TCH {FEET}).
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -11°C OR ABOVE 54°C.
 CHART NOTE: * RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 6000.
 CHART SPEED ICON IN PLANVIEW AT CHPMN: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART: NAAS MUSTIN (ABANDONED)
 HOLD S, RT, 003.00 INBOUND.
 CHART FAS OBST: 269 STACK (34-000117) 395231N/0750921W.
 CHART VDP AT 1.43 NM TO RW27L.
 WAAS CHANNEL # 97322
 REFERENCE PATH ID: W27A
 CHART CIRCLING ICON.
 LTP HAE: -29.9 M

MINIMUMS:

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

ALTERNATE: NA STANDARD - CAT D 800-2 1/4

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
LPV DA*	210	2400	200	210	2400	200	210	2400	200	210	2400	200				
LNAV/VNAV DA	422	4000	412	422	4000	412	422	4000	412	422	4000	412				
LNAV MDA	540	2400	530	540	2400	530	540	5500	530	540	5500	530				
CIRCLING	540	1	504	600	1	564	620	1 1/2	584	720	2 1/4	684				



CHANGES - REASONS

1. ESTABLISHED FIX FLYNN, FIX HEDDA, FIX HIBLY (IF), FIX PUURL AND FIX WIWON. – ATC REQUESTED FOR PROCEDURE REDESIGN FOR AIR TRAFFIC FLOW EFFICIENCY AND SAFETY.
2. DELETED TERMINAL ROUTES INITIAL SEGMENTS FROM CYN VORTAC (IAF) TO FIX ORANE (IF) AND FROM FIX ENZEW (IAF) TO FIX ORANE (IF) AND ADDED INITIAL SEGMENT FROM FIX CHPMN (IAF) TO FIX HEDDA TO FIX WIWON TO FIX FLYNN TO FIX PUURL TO FIX HILBY (IF). - PROCEDURE REDESIGN PER ATC REQUEST FOR AIR TRAFFIC FLOW EFFICIENCY AND SAFETY.
3. CHANGED TERMINAL ROUTES FIX ORANE FROM AN INTERMEDIATE FIX (IF) TO AN INTERMEDIATE SEGMENT STEPDOWN FIX (SDF) AND ADDED INTERMEDIATE SEGMENT FROM FIX HIBLY (IF) TO FIX ORANE (SDF). – ATC REQUESTED FOR PROCEDURE REDESIGN FOR AIR TRAFFIC FLOW EFFICIENCY AND SAFETY.
4. CHANGED TERMINAL ROUTES INTERMEDIATE SEGMENT MINIMUM ALTITUDE FROM FIX ORANE TO FIX FESTI SEGMENT FROM 3000 TO 3700. – ATC REQUESTED FOR PROCEDURE REDESIGN FOR AIR TRAFFIC FLOW EFFICIENCY AND SAFETY
5. CHANGED TERMINAL ROUTES INTERMEDIATE SEGMENT COURSE/DISTANCE FROM FIX FESTI TO FIX TORNE SEGMENT FROM 267.65/2.47 NM TO 267.64/2.48 NM. - FIX FESTI MOVED 1.42 FT NORTH AND UPDATED PFAF CALCULATIONS FIX TORNE MOVED 4.03 FT WEST.
6. CHANGED TERMINAL ROUTES DISTANCE FROM FIX TORNE TO FIX GLOUSE FROM 2.91 NM TO 2.90 NM. – FIX GLOUSE MOVED 23.23 FT NORTH ALIGNING ON FAC.
7. CHANGED MISSED APPROACH INSTRUCTIONS FROM “CLIMB TO 1500 THEN CLIMBING LEFT TURN TO 3000 DIRECT OOD VORTAC AND HOLD” TO “CLIMB TO 500 THEN CLIMBING LEFT TURN TO 3000 DIRECT WUDRR AND HOLD”, AND UPDATED TERMINAL ROUTES SECTION CA FROM 1500 TO 500, DELETED OOD VORTAC AND ADDED FIX WUDRR. – ATC REQUESTED REDESIGN OF MISSED APPROACH.
8. PROFILE LINE 2, CHANGED PROFILE STARTS AT FROM ORANE TO HILBY. – ATC REQUEST FOR REDESIGN AND CHANGE OF INTERMEDIATE FIXES.
9. PROFILE LINE 4, ADDED “HILBY 5000”, CHANGED FIX ORANE ALTITUDE FROM 3500 TO 4600 AND FIX FESTI ALTITUDE FROM 3000 TO 3700, AND DELETED “*” AFTER “GLOUSE/6.30 NM TO RWY 27L 2060”. – ALTITUDES PER ATC REQUEST FOR PROCEDURE REDESIGN FOR AIR TRAFFIC FLOW EFFICIENCY AND SAFETY, AND “*” NO LONGER REQUIRED PER FAAO 8260.19I PARAGRAPH 1-1-5.F.(12).
10. PROFILE LINE 5, ADDED “200 HAT: 0.45” AND DELETED “250 HAT: 0.61” FROM ADDITIONAL FLIGHT DATA. – LPV HAT LOWERED FROM 250 TO 200; PFAF MOVED 4.03 FT WEST AND PREVIOUS CONTROLLING OBSTACLE 11 SIGN 395207.26N/0751423.63W IS NO LONGER IN THE DATABASE AND NO LONGER CONTROLLING; DOCUMENTATION IAW FAAO 8260.19I PARAGRAPH 8-6-7.E.
11. PROFILE LINE 7, ADDED 20:1 IS CLEAR. – REQUIRED IAW FAAO 8260.19I PARAGRAPH 8-6-7.G.(3)(A).
12. ADDED PBN REQUIREMENTS NOTE “RNP APCH – GPS” AND DELETED CHART NOTE “DME/DME RNP-0.3 NA”. – NAVSPEC AND SENSOR DOCUMENTED IAW FAAO 8260.19I PARAGRAPH 8-6-8.B.(2).
13. CHANGED NOTES FROM “CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -12°C (11°F) OR ABOVE 54°C (130°F)” TO “CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -11°C OR ABOVE 54°C”. – UPDATED FIVE YEAR CLIMATE DATA 2018-2022, AND FAHRENHEIT REMOVED IAW FAAO 8260.19I PARAGRAPH 8-6-9.R.
14. ADDED NOTE “CHART SPEED ICON IN PLANVIEW AT CHPMN: MAX 210 KIAS”. – ATC REQUESTED SPEED FOR REDESIGN OF INITIAL SEGMENT; THIS KEEPS FIX DTA SMALLER AND REDUCES MINIMUM REQUIRED LEG LENGTH FOR FIX FLYNN TO FIX PUURL SEGMENT FROM 4.49 NM TO 3.35 NM.
15. DELETED CHART NOTES “SIMULTANEOUS APPROACH AUTHORIZED”, “USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS”, AND “LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS”. – ATC DOES NOT USE RNAV FOR SIMULTANEOUS APPROACHES AND INITIAL SEGMENT REDESIGN DOES NOT MEET DESIGN CRITERIA IAW FAAO 8260.3E PARAGRAPH 15-2-4.B.
16. DELETED CHART PLANVIEW NOTES “PROCEDURE NA FOR ARRIVALS AT ENZEW ON V123-157-V213 NORTHEAST BOUND” AND “PROCEDURE NA FOR ARRIVAL ON CYN VORTAC AIRWAY RADIALS 226 CW 274”. – IAFS FIX ENZEW AND CYN VORTAC DELETED FROM PROCEDURE.
17. CHANGED ADDITIONAL FLIGHT DATA, HOLDING FROM “HOLD SW, LT, 034.28 INBOUND” TO “HOLD S, RT, 003.00 INBOUND”. – HOLDING CHANGED FROM OOD VORTAC TO FIX WUDRR PER ATC REQUEST.
18. CHANGED ADDITIONAL FLIGHT DATA CHART FAS OBSTACLE FROM 281 STACK 395225N/0750942W TO 269 STACK (34-000117) 395231N/0750921W. – UPDATED OBSTACLE EVALUATION AND FIX GLOUS MOVED 23.23 FT NORTH ALIGNING ON FAC.
19. CHANGED ADDITIONAL FLIGHT DATA VDP CHARTING FROM “CHART VDP AT 1.49 NM TO RW27L*” TO “CHART VDP AT 1.43 NM TO RWY27L”, AND DELETED “* LNAV ONLY”. – LNAV MDA LOWERED 20 FT, AND “* LNAV ONLY” NO LONGER REQUIRED IAW FAAO 8260.19I PARAGRAPH 1-1-5.F.(12).
20. LOWERED LPV DA/HAT ALL CATS FROM DA 260/HAT 250 TO DA 210/HAT 200. - PREVIOUS CONTROLLING OBSTACLE 11 SIGN 395207.26N/0751423.63W IS NO LONGER IN THE DATABASE AND NO LONGER CONTROLLING.
21. ADDED CHART NOTE “* RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA” AND ADDED “*” TO LPV MINIMA. – LPV NOW HAS HAT 200, AND VISIBILITY REDUCTION ALLOWED IAW FAAO 8260.3E TABLE 3-3-1 AND FAAO 8400.13F CHAPTER 2.
23. LOWERED LNAV/VNAV DA/HAT ALL CATS FROM DA 423/HAT 413 TO DA 422/HAT 412 AND LOWERED VISIBILITY ALL CATS FROM RVR 4500 TO RVR 4000. – CONTROLLING OBSTACLE DID NOT CHANGE; PFAF MOVED 4.03 FT WEST AND OCS SLOPE CHANGED FROM 23.11:1 TO 23.00:1; UPDATED VISIBILITY IAW FAAO 8260.3E TABLE 3-3-1.
24. LOWERED LNAV MDA ALL CATS FROM MDA 560/HAT 550 TO MDA 540/HAT 530 AND LOWERED VISIBILITY CAT C/D FROM RVR 6000 TO RVR 5500. – FAS OBSTACLE CHANGED FROM 281 STACK (34-000244) 395225.00N/0750942.00W TO 269 STACK (34-000117) 395231.00N/0750921.00W; UPDATED VISIBILITY IAW FAAO 8260.3E TABLE 3-3-1.
25. LOWERED CIRCLING CAT A MDA/HAA FROM MDA 560/HAA 524 TO MDA 540/HAA 504. – CIRCLING CAT A MDA NOW OBSTACLE-BASED; WAS PREVIOUSLY RAISED TO THE STRAIGHT-IN LNAV MDA.
26. CRC REMAINDER CHANGED FROM 9731E0DE TO 7AECAB64, FPAP LAT/LONG CHANGED FROM 395138.9175N/0751630.6995W TO 395138.9125N/0751630.7095W, AND LTP/FTP LAT/LONG CHANGED FROM 395203.9145N/0751425.4715W TO 395203.9140N/0751425.4720W. – LPV HAT CHANGED FROM HAT 250 TO HAT 200, VAL CHANGED FROM 50 TO 35, AND PFAF MOVED 4.03 FT WEST.



COORDINATED WITH:

A4A **ALPA** **AOPA** **APA** **HAI** **NBAA** **OTHER:** ZDC, PHL APP CON, PHL ATCT, AMGR

FLIGHT CHECKED BY
MICHAEL G CAMPBELL

Digitally signed by
ERIC N SUSKI
Dec 07, 2023

OFFICE
FPO

DATE
12/05/2023

DEVELOPED BY
MICHAEL MCCARTNEY

Digitally signed by
MICHAEL A MCCARTNEY
Oct 13, 2023

OFFICE
AJV-A431

DATE
09/22/2023

APPROVED BY
ERIC N SUSKI

Digitally signed by
ERIC N SUSKI
Oct 26, 2023

OFFICE
AJV-A431

DATE

TITLE
MANAGER

FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPHL
RUNWAY	RW27L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	395203.9140N
LTP/FTP LONGITUDE	0751425.4720W
LTP/FTP ELLIPSOIDAL HEIGHT	-00299
FPAP LATITUDE	395138.9125N
FPAP LONGITUDE	0751630.7095W
THRESHOLD CROSSING HEIGHT (TCH)	00057.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	7AECAB64

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00031
FPAP ORTHOMETRIC HEIGHT	+00031

