

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GLS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29**

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 EWR	PROCEDURE NAME GLS RWY 22R	ORIGINAL/AMENDMENT 2A	CITY NEWARK	STATE NJ
AIRPORT ELEVATION 18	TDZE 10	SUPERSEDED GLS RWY 22R	DATED 02/23/2023	MAG VAR 13W
FACILITY GLS	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE	REQUIRED EFFECTIVE DATE 01/22/2026	EPOCH YEAR 1985
			CANCEL/SUSPEND	

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
PATRN	IAF	AGNSS		TF	FB	1.00	165.17	7.17	3000
AGNSS	IF	VERDE		TF	FB	1.00	218.89	1.57	2500
VERDE		TIPPS		TF	FB	1.00	218.88	1.57	2000
TIPPS		TALTE	PFAF	TF	FB	1.00	218.87	1.57	1500
TALTE	PFAF	RW22R	MAP	TF	FO	0.30	218.86	4.38	
RW22R	MAP	2000 MSL		CA			218.86		2000
2000 MSL		KILMA		DF	FO	1.00			3000

MISSED APPROACH

MAP:
GLS: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000, THEN CLIMBING RIGHT TURN TO 3000 DIRECT KILMA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT AGNSS
- FAC: 218.86 PFAF: TALTE DIST FAF TO MAP: 4.38 DIST FAF TO THLD:
- MIN ALT: AGNSS 3000, VERDE 2500, TIPPS 2000, TALTE 1500
- DIST TO THLD FROM PFAF: 4.38 MM: IM: 150 HAT: 200 HAT: 0.46 GS ANT: IM:
- MIN GP INCPT: 1500 GP ALT AT PFAF: TALTE 1500 OM: MM:
- GP ANGLE: 3.10 34:1: IS CLEAR 20:1: IS CLEAR TCH: 47.2
- MSA FROM: RW22R 2900



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 210.
CHART PROFILE NOTE: VGSI AND GLS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: CAUTION, DEPARTING TEB RWY 24 TRAFFIC CLIMBING TO 1500 MSL.
CHART SPEED ICON IN PLANVIEW AT AGNSS: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD W, RT, 072.00 INBOUND.
GBAS CHANNEL # 20672
REFERENCE PATH ID: G22B
LTP HAE: -29.3 M
CHART KTEB IN PLANVIEW

MINIMUMS:

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

ALTERNATE: NA

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>												
GLS DA	210	1800	200	210	1800	200	210	1800	200	210	1800	200			

CHANGES - REASONS

- AIRPORT ELEVATION CHANGED FROM 17 TO 18. - NEW DATA SURVEY PULL.
- NOTES: ADDED CAUTION, DEPARTING TEB RWY 24 TRAFFIC CLIMBING TO 1500 MSL. - ATC REQUEST FOR TRAFFIC DECONFLICTION.
- FAS DATA: LTP/FTP LAT LONG CHANGED FROM 404156.4015N/0740951.9705W TO 404156.3985N/0740951.9645W. - NEW SURVEY DATA PULL.
- FAS DATA: FPAP LAT LONG CHANGED 404031.3690N/0741046.0220W TO 404031.3675N/0741046.0190W. - NEW SURVEY DATA PULL.
- FAS DATA: CRC REMAINDER CHANGED FROM D476AEB3 TO 3CFA134A. - FPAP AND LTP LAT/LONG CHANGED.

10/29/2025: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/12/2025.
ADDED CHART KTEB IN PLANVIEW IN ADDITIONAL FLIGHT DATA.

12/04/2025: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/12/2025
REQUIRED EFFECTIVE DATE: CHANGED FROM ROUTINE TO 01/22/2026

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA OTHER: ZNY, NY TRACON, EWR ATCT, AMGR

FLIGHT CHECKED BY

PENDING

OFFICE

DATE

Digitally signed by

Digitally signed by
CASIMIR L TABAKA

DEVELOPED BY

JOHN KEEFER

JOHN A KEEFER

Sep 09, 2025

Dec 04, 2025

OFFICE

AJV-A4

DATE

08/12/2025

APPROVED BY

CASIMIR L. TABAKA

Digitally signed by
CASIMIR L TABAKA

Sep 19, 2025

OFFICE

AJV-A4

DATE

**TITLE
MANAGER**



AIRPORT ID
EWR

PROCEDURE NAME
GLS RWY 22R

ORIGINAL/AMENDMENT
2A

CITY
NEWARK

STATE
NJ

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	14
AIRPORT IDENTIFIER	KEWR
RUNWAY	RW22R
APPROACH PERFORMANCE DESIGNATOR	1
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	1
REFERENCE PATH IDENTIFIER (APPROACH ID)	G22B
LTP/FTP LATITUDE	404156.3985N
LTP/FTP LONGITUDE	0740951.9645W
LTP/FTP ELLIPSOIDAL HEIGHT	-00293
FPAP LATITUDE	404031.3675N
FPAP LONGITUDE	0741046.0190W
THRESHOLD CROSSING HEIGHT (TCH)	00047.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.10
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	
VERTICAL ALERT LIMIT (VAL)	

CRC REMAINDER 862B23CE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00030
FPAP ORTHOMETRIC HEIGHT	+00030



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD**

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
EWR	GLS RWY 22R	2A	NEWARK	NJ	18	GLS

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM PATRN **TO** AGNSS

RNP DISTANCE PAT MAP HAT HMAS

1.00 7.17

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	405636.00N/0741133.00W	732	215	8	4B	1000				AT1268	3000
TERRAIN	405415.00N/0741027.00W	492 (500)								AS1500	2000

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM AGNSS **TO** VERDE

RNP DISTANCE PAT MAP HAT HMAS

1.00 1.57

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (34-001064)	404753.26N/0740525.76W	676	20	3	1A	500				AT1324	2500
TERRAIN	404909.00N/0740639.00W	124 (100)								AS1500	1600

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



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INTERMEDIATE: STEPDOWN

FROM
VERDE **TO**
TIPPS

RNP **DISTANCE** **PAT** **MAP** **HAT** **HMAS**
1.00 1.57

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (34-001064)	404753.26N/0740525.76W	676	20	3	1A	500				AT824	2000
TERRAIN	404745.00N/0740739.00W	124 (100)								AS1500	1600

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE: STEPDOWN

FROM
TIPPS **TO**
TALTE

RNP **DISTANCE** **PAT** **MAP** **HAT** **HMAS**
1.00 1.57

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (34-001063)	404747.86N/0740526.10W	676	20	3	1A	500				AT324	1500
TERRAIN	404657.00N/0740821.00W	150 (200)								AS1000	1200

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



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FINAL: GLS

FROM TALTE **TO** RW22R

RNP 0.30 **DISTANCE** 4.38 **PAT** **MAP** DA **HAT** 200 **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				210

COMPUTATIONS

ALT **KIAS** **KTAS** **HAA** **VKTW** **TR** **BA** **DTA** **COURSE CHANGE** **DVEB** **VEB OCS** **RF CENTER FIX/DISTANCE**

SEGMENT REMARKS:

MISSED APPROACH: GLS

FROM DA **TO** KILMA

RNP 0.30-1.00 **DISTANCE** **PAT** **MAP** **HAT** **HMAS** 42

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
STACK (36-000251)	403528.49N/0741155.21W	515	500	50	5D	1000					1600
TERRAIN	403206.00N/0741927.00W	226 (200)								AS1500	1700

COMPUTATIONS

ALT **KIAS** **KTAS** **HAA** **VKTW** **TR** **BA** **DTA** **COURSE CHANGE** **DVEB** **VEB OCS** **RF CENTER FIX/DISTANCE**

SEGMENT REMARKS:

CIRCLING ALL CATS CAT A CAT B CAT C CAT D CAT E NOT AUTHORIZED

MSA

CENTER RW22R **RADIUS** 25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	BLDG (36-020633)	404246.75N/0740047.27W	096	7.0	1806	20	3	1A	1000			2900

QUALITY
40
CHECKED

MSA REMARKS:

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FACILITY
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NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZNY ARTCC, NEW YORK APP CON, EWR TOWER

WX SERVICE ASOS	LOCATION EWR	HRS OPERATION 24	ALTIMETER SOURCE EWR	DISTANCE	WMSCR Y	ADJUSTMENTS 0
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BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
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WX REMARKS:

PRIMARY NAVAID GEWR GBAS	MONITOR POINT	HRS OPERATION	CAT
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APPROACH AND RUNWAY LIGHTING SYSTEM	RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW29 - C/LINE, REIL, HIRL, TDZ, PAPI-4R	NPI-G	
RW04L - MALSR, C/LINE, HIRL, TDZ, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW04R - ALSF-2, TDZ, C/LINE, HIRL, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW11 - TDZ, C/LINE, REIL, HIRL, PAPI-4R	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW22L - ALSF-2, HIRL, TDZ, C/LINE, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW22R - MALSR, REIL, C/LINE, TDZ, HIRL, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT

GLIDESLOPE ANGLE 3.10	ELEV RWY THRESHOLD 9.7	TCH 47.2	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE 3.10	TCH 66.4
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE 1441
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
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CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS



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HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

100 FT VEGETATION USED.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

WAIVER 8260.58 PARA 1-3-1 C. ATC TURNS TO JOIN INITIAL AND INTERMEDIATE SEGMENTS.

APPROVAL FOR NON-STANDARD NOTE.

GBAS FREQUENCY USED FOR RPDS - 114.525

PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	3.17
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	0.96
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	205.86
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	100
DISTANCE FROM	THLD	TO 1500FT POINT	4.89
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	2.66
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	205.87
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	200

THRESHOLD COORDINATES (IF STR-IN)

404156.40N/0740951.96W

ARP COORDINATES

404132.93N/0741007.28W

RUNWAY APCH END AND DIST FURTHEST FROM ARP

RUNWAY 4L DISTANCE 1.14 NM

FAF COORDINATES

404553.30N/0740721.13W

FIX NAME COORDINATES

IF AGNSS 405007.75N/0740438.75W

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.

THLD DISPLACED 1441FT, ACTUAL COORDINATES: 404209.22N/0740943.82W

PART E: PREPARED BY

NAME

JOHN KEEFER

OFFICE

AJV-A4

DATE

08/12/2025

TITLE

AERONAUTICAL INFORMATION SPECIALIST

