

NEWARK LIBERTY INTL (EWR/KEWR)

Elevation 17ft

CATEGORY A

No video brief available.

GENERAL

- Major international HUB for United Airlines and FEDEX
 - KEWR is heavily congested airport and delays are the norm
 - <u>Delays on arrival</u>: average 22 min / 26% of all arrivals were delayed by more than 15 min
 - <u>Delays on departure</u>: average: 26 min / 29% of all departures were delayed by more than 15 min
- Traffic composes mainly of commercial activities passenger and cargo operations
- KEWR is surrounded by major highways (I-95, I-78) and routes (U.S. Routes 1/9), urban and commercial development (South, West, North of KEWR), and Port of Newark (East of KEWR)
- Preferred Arrival RWYs: 04R/22L 04R up to ILS Cat IIIB, 22L up to ILS Cat IIIC
- Preferred Departing RWYs: 04L/22R
- Other RWYs: 11/29 mainly used during crosswind (RWYs 04/22) for up to ACFT CAT D
- Visual separation is a favourite ATC spacing method

Threats

CFIT

- 1. No major terrain obstacles
- 2. Obstacles on approach to RWYs 22 (291' and 597') if on track, ACFT will be well above these
- 3. Obstacles on departure RWYs 04/22 and 11/29 nothing above 400' (buildings, trees, antennas) caution is required

Runway Incursion

- 1. RWYs and TWYs are clearly marked
- 2. There is a taxiway (TWY P) between parallel RWYs pay attention on approach
- 3. Potential conflict zones:
 - As departing ACFT can arrive from TWYs A and B, proper sequencing is more involved and good coordination between ATCs and crews is required
 - Make sure ATC clears you to cross RWY 11/29 from following TWYs:
 - W1
 - U
 - S
 - Q
 - R
 - P
 - EE
 - Make sure ATC clears you to cross RWY 04L/22R, when arriving from RWY 04R/22L, from following TWYs:
 - L
 - K
 - J
 - G
 - E
 - C ■ N
 - IN



- 4. Land And Hold Short Operations (LAHSO) operations can occur when:
 - There exists at least 3 miles visibility and 1000' ceiling, and no wind shear has been reported
 - RWY 04L Available landing distance (ALD): 7,750 feet for landing RWY 11
 - RWY 04L ALD: 7,750 feet for departing RWY 29
 - RWY 04R ALD: 8,100 feet for landing RWY 11
 - RWY 04R ALD: 8,100 feet for departing RWY 29

Loss of Control

1. Birds may be on and in vicinity of airport

Special Considerations

- 1. KEWR is located in heavily congested NY area other major airports in the area:
 - KJFK 18 nm East of KEWR
 - KTEB 10 nm North of KEWR
 - KLGA 14 nm North-East of KEWR
- 2. NYC airspace is very busy, from commercials flights to private operators
 - Monitor for traffic high chance of traffic incursion
 - High volume of helicopter traffic from 65NJ heliport
 - Parasailing and banner towing operations 1000' and below in upper and lower NY Bays
- 3. KEWR is a noise sensitive airport
 - Expect late descend instructions
 - Expect higher assigned altitudes on departures
 - Between 2300 0700 LT expect:
 - Limitations on PENNS 2 STAR
 - Adjustments to SIDs
- 4. Monitor ATC instructions closely
 - o ATC instructions at times are very fast and full attention is required
 - ATC expects prompt responses (ATC might get little irritated if crew fails to follow instructions / similar to KJFK)

ARRIVAL

Diversion Airports			
NEW YORK/KENNEDY INTL	JFK/KJFK	18 nm/113°T	CAT B
NEW YORK/STEWART INTL	SWF/KSWF	48 nm/016°T	CAT A
PHILADELPHIA	PHL/KPHL	70 nm/238°T	CAT A
BALTIMORE	BWI/KBWI	147 nm/245°T	CAT B
WASHINGTON DULLES INTL	IAD/KIAD	185 nm/249°T	CAT A

APPROACH

- ACFT is usually cleared to descend via STAR
 - Plan accordingly and in advance
 - Plan to meet all restrictions (speed and altitude)
- ATC vectors are to be expected at the end of the STAR to final approach
- Expected speed limit instructions from the ATC
- <u>RWY 22L</u>:
 - RWY 22L and runway 11 can be used simultaneously
- <u>RWY 04R</u>:



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- Primary RWY 04R (always used by ACFT CAT C, D, and E)
 - RWY 04R and RWY 11 can be used simultaneously as long as RWY 04R arrivals land and hold short of RWY11
- During busy periods, arrivals on RWY 04R and 04L can land simultaneously, however RWY separation is 950'; ATC ensures separation until visual separation can be established (no parallel landings!)
- <u>RWY 29</u>:
 - Visual approach for RWY 29 is used:
 - BRIDGE VISUAL when RWY 04R is used
 - STADIUM VISUAL when RWY 22L is used
- Vacate landing RWY expeditiously and ensure to be fully vacated before stopping

GROUND

- TWY A is primary route for INBOUND ACFT
- TWY B is primary route for OUTBOUND ACFT
- TWYs A, B, S, and Z are bidirectional Suggested Arrival Taxi Routes

То	c	E	G	J	к	м	N	v	w	Y	z
RA	RC, A	А	A	S, A	S, A	S, A	N, A	RB, A	S, A	S, A	S, A
RB	RC, A	А	A	S, A	S, A	S, A	N, A	RB	S, A	S, A	S, A
RC, DK, RD, DL, RE, DM, RF	RC, A	A	A	S, A	S, A	S, A	N, PA, A	PA, A	S, A	S, A	S, A
RG	N, PA, A	A	A	J	M, A	M, A	N, PA, A	PA, A	S, A	S, A	S, A
RH, RJ, RK, RL	N, PA, A	A	A	A	A	S, A	N, PA, A	V, A	S, A	S, A	S, A
UP	RC, A	A	A	S, A	S, A	S, A	N, PA, A	RB, A	S, A	S, A	S, A
FE	RC, A, PA, RB	A, PA, RB	A, PA, RB	S, A, PA, RB	S, A, PA, RB	S, A, PA, RB	PA, RB	RB	S, A, PA, RB	S, A, PA, RB	S, A, PA, RB
CC, AA	D, PA	A, PA	A, PA	S, A, PA	S, A, PA	S, A, PA	PA	PA	S, A, PA	S, A, PA	S, A, PA
West Park	RC, A, S	A, S	A, S	s	s	s	PA, A, S	PA, A, S	s	S	z

Suggested Departure Taxi Routes

From	4L	11	22R	22R at W	29 (4/22 open)	29 (4/22 closed)
RA	A, RB, D, AA	N, B, U, W	N, B, R, Z	N, B, R, W	N, B, R, Z	N, B, R, K, EE
RB	RB, D, AA	B, U, W	B, R, Z	B, R, W	B, R, Z	B, R, K, EE
RC, DK, RD, DL, RE, DM, RF	B, D, AA	B, U, W	B, R, Z	B, R, W	B, R, Z	B, R, K, EE
RG, RH, RJ, RK, RL	B, D, AA	B, U, W	B, K, R, Z	B, K, R, W	B, R, Z	B, R, K, EE
UP	B, RB, D, AA	B, U, W	B, R, Z	B, R, W	B, R, Z	B, R, K, EE
FE	RB, D, AA	RB, B, U, W	RB, B, R, Z	RB, B, R, W	RB, B, R, Z	RB, B, R, K, EE
CC, AA	D, AA	D, B, U, W	D, B, R, Z	D, B, R, W	D, B, R, Z	D, B, R, K, EE
West Park	Z, R, B, D, AA	Z	Z	Z, R, W	Z	Z

• Source: https://nyartcc.org/znywiki/index.php/EWR_SOP#Ground

- Preferred Gates:
 - Pax: Terminal B Concourse B3 (gates: 60 68)
 - Ramp Freq.:

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- <u>Arrival</u>: 122.850 MHz for gates 60 68
 - Push: 122.850 MHz for gates 60 62
 - 129.575 MHz for gates 63 68
- Cargo: AIR CARGO entry points: TWYs Z2, Z3, Z4

DEPARTURE

- <u>RWY 04L</u>:
 - Full length departure is used, when 04R is used for landing



- RWY 04R may be also used for departures
- o Initial heading: 039° to 500', then RIGHT 060°
- o Initial altitude: 3000' OR 2000' if KLGA RWY13 in use
- <u>RWY 22R</u>:
 - Intersection departure from TWY W is used for all departures, when RWY 22L is used for landing. Available distance: 10150'
 - Intersection departure from TWY Y is used for all departures, when RWY 29 is used for landing. Available distance: 9850'
 - o Full length can be used only if requested for performance or operational necessity
 - Initial heading: 190°
 - Initial altitude: 2500'
- <u>RWY 11</u>:
 - Initial heading: 060° to D4.0 IEZA, then 290°
 - o Initial altitude: 3000' OR 2000' if KLGA RWY13 in use
- <u>RWY 29</u>:
 - o Initial heading: 288°
 - o Initial altitude: 5000'
- EWR SID is standard and preferred departure procedure
- PORTT SID is offered, if requested by the crew
- LIBERTY SID should be avoided
- Pilots should be ready for a rapid line-up according to ATC instructions
- Cockpit checks should be completed prior to line-up and any checks requiring completion whilst on the runway should be kept to a minimum required. Commence take-off roll immediately after receiving take-off clearance. Pilots not able to comply with the above requirements shall notify ATC as soon as possible

WEATHER

- KEWR lies between humid subtropical and humid continental climate
- Cold winters, and hot and humid summers (average annual temp. 12.7*C)
- Snowfall annual average 75 cm, but it regularly experiences major snow storms/blizzards (where it can experience heavy snowfall in 24 hours; record: 66 cm in 24 hours)
- Summer thunderstorms are frequent can be severe
- Precipitation is in range of 74 122 mm per month; it usually rains 8 to 12 days per month
- De-Icing and winter treatment services are available
- Primary De-Icing Pad is located in the "Ballpark" surrounding TWYs speed limit 17kts
- In winter months take special care for threats of blizzards and other weather related delays

OPERATIONAL INFORMATION

Handling Agent	Worldwide Flight Services
Handling Agent VHF	-
Potable Water	Uplift permitted

IF ONLY ELEC. PWR is required	Use ground power at all times				
If BOTH ELEC. PWR and A/C is required:	Use both ground services at all times				