



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TAXIING - MAINTENANCE PRACTICES

EFFECTIVITY: ACFT MODEL(S) EMB-145

1. General

- A. This section gives the aircraft taxiing procedure. Only approved persons who fully know the engine start and shutdown procedures, limitations, and taxiing techniques can do the aircraft taxiing. It must obey the Local Authorities' rules.

CAUTION: THE AREAS FOR TAXIING MUST BE FREE OF OBSTACLES AND HAVE THE NECESSARY SPACE FOR THE MANEUVERS.

- B. The turning radii with related distances and the minimum turning radii are shown in the figures.
- C. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
09-20-00-500-801-A	AIRCRAFT TAXIING	ACFT MODEL(S) EMB-145



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TASK 09-20-00-500-801-A

EFFECTIVITY: ACFT MODEL(S) EMB-145

2. AIRCRAFT TAXIING

A. General

- (1) During the aircraft taxiing, one or the two engines can be on.

B. References

REFERENCE	DESIGNATION
AMM TASK 10-10-01-500-801-A/200	AIRCRAFT NORMAL PARKING
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Operates the aircraft	At the cockpit LH seat
1	As an observer	At the cockpit RH seat

I. Preparation

SUBTASK 841-008-B

- (1) Area clear for taxiing.
- (2) Landing gear safety pins installed to the landing gears ([AMM TASK 32-00-01-910-801-A/200](#)).
- (3) Brakes in serviceable conditions.
- (4) Nose landing gear steering control in serviceable conditions.

J. Taxiing

SUBTASK 580-008-B

CAUTION: OBEY THE INSTRUCTIONS IN THE OPERATIONS MANUAL.



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NOTE: Do not use differential braking during the taxiing. For the most satisfactory operation, use minimum engine power or, when necessary, a lightly asymmetric power and the steering control of the nose wheels.

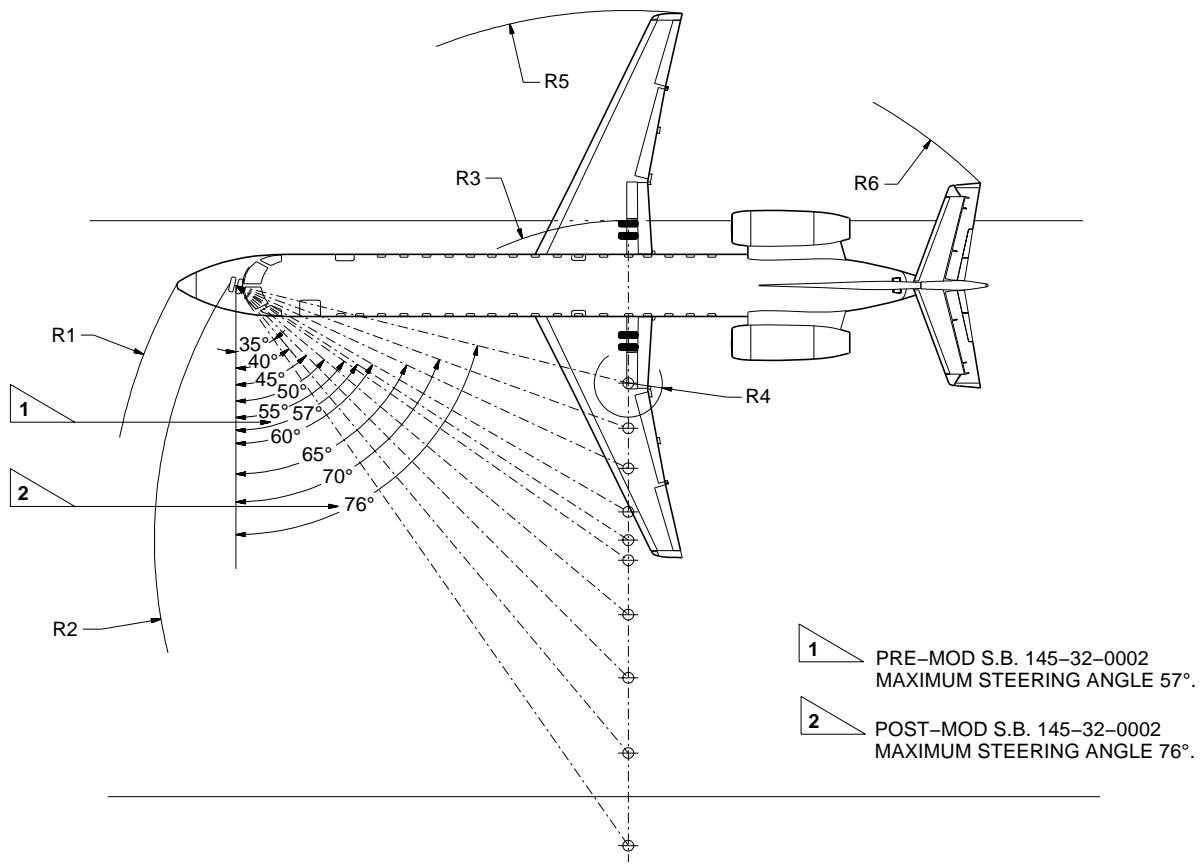
- (1) Always do the turns with the largest possible radius permitted by the available space ([Figure 201](#)) ([Figure 202](#)) ([Figure 203](#)) ([Figure 204](#)).
- (2) Taxi the aircraft at a speed applicable to ramp operations.
- (3) Do not do the turns at more than 25 km/h in speed.

K. Follow-on

SUBTASK 842-008-B

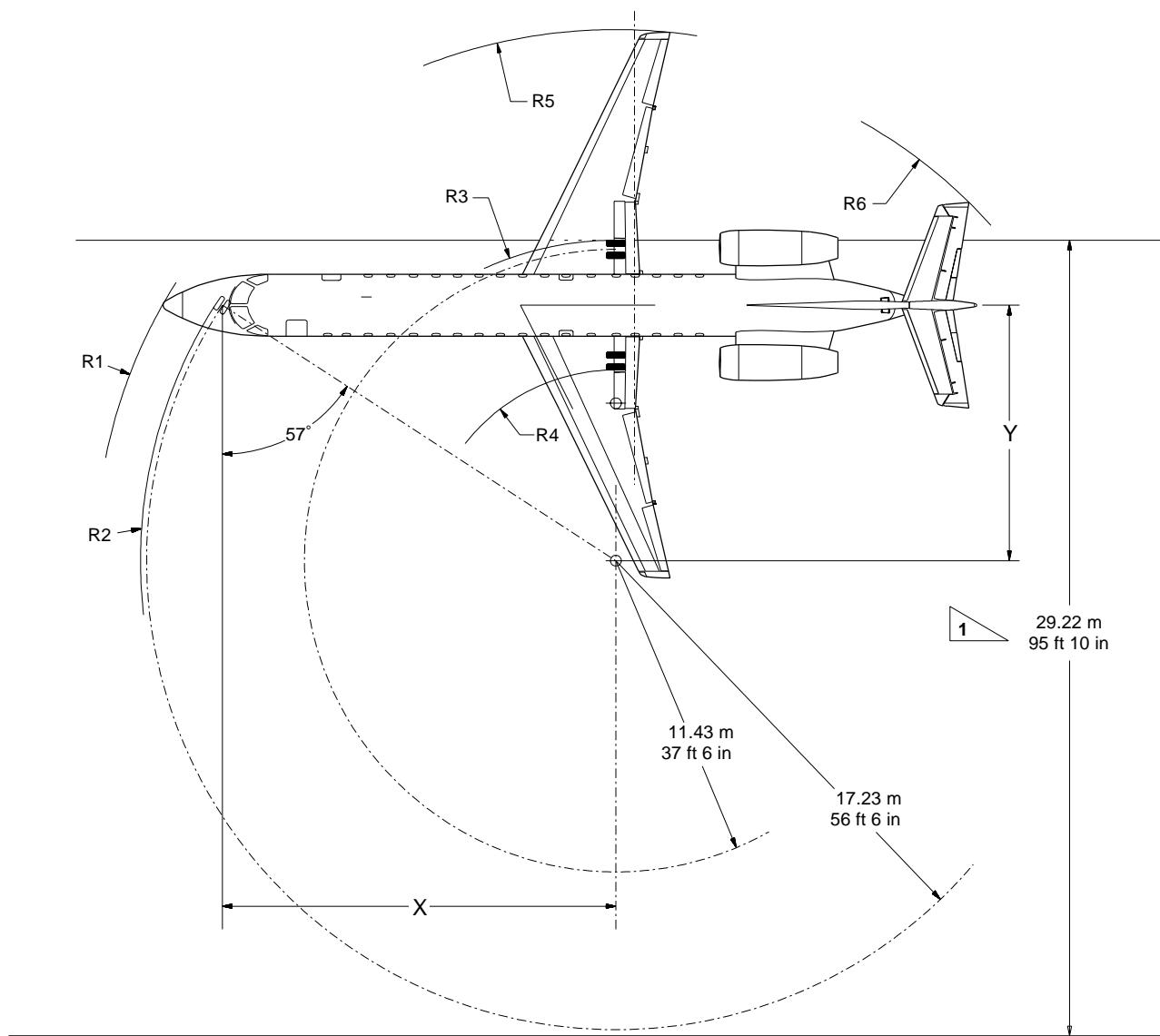
- (1) Install the wheel chocks ([AMM TASK 10-10-01-500-801-A/200](#)).
- (2) Set the emergency/parking brake.

NOTE: To prevent hydraulic fluid transference from system 1 to system 2 or vice versa, first apply brakes with the pedals and pull or release the emergency/parking brake handle.

EFFECTIVITY: ACFT MODEL(S) EMB-145
Turning Radii - No Slip Angle
Figure 201


STEERING ANGLE	NOSE R1		NOSE GEAR R2		OUTBOARD GEAR R3		INBOARD GEAR R4		RIGHT WINGTIP R5		RIGHT TAILTIP R6	
35°	26.56 m	87 ft 2 in	25.41 m	83 ft 4 in	23.02 m	75 ft 6 in	18.25 m	59 ft 10 in	30.72 m	100 ft 9 in	27.64 m	90 ft 8 in
40°	23.99 m	78 ft 8 in	22.70 m	74 ft 6 in	19.60 m	64 ft 4 in	14.84 m	48 ft 8 in	27.31 m	89 ft 7 in	24.68 m	80 ft 11 in
45°	22.07 m	72 ft 5 in	20.66 m	67 ft 9 in	16.83 m	55 ft 3 in	12.07 m	39 ft 7 in	24.55 m	80 ft 6 in	22.37 m	73 ft 4 in
50°	20.61 m	67 ft 7 in	19.08 m	62 ft 7 in	14.51 m	47 ft 7 in	9.74 m	31 ft 11 in	22.23 m	72 ft 11 in	20.52 m	67 ft 4 in
55°	19.48 m	63 ft 11 in	17.86 m	58 ft 7 in	12.50 m	41 ft 0 in	7.74 m	25 ft 5 in	20.24 m	66 ft 5 in	19.00 m	62 ft 4 in
57°	19.11 m	62 ft 8 in	17.45 m	57 ft 3 in	11.77 m	38 ft 7 in	7.00 m	23 ft 0 in	19.51 m	64 ft 0 in	18.47 m	60 ft 7 in
60°	18.62 m	61 ft 1 in	16.90 m	55 ft 5 in	10.73 m	35 ft 2 in	5.96 m	19 ft 6 in	18.47 m	60 ft 7 in	17.75 m	58 ft 3 in
65°	17.95 m	58 ft 11 in	16.16 m	53 ft 0 in	9.12 m	29 ft 11 in	4.35 m	14 ft 3 in	16.88 m	55 ft 4 in	16.69 m	54 ft 9 in
70°	17.44 m	57 ft 2 in	15.6 m	51 ft 2 in	7.64 m	25 ft 1 in	2.87 m	9 ft 5 in	15.4 m	50 ft 7 in	15.8 m	51 ft 10 in
76°	17.01 m	55 ft 9 in	15.11 m	49 ft 7 in	5.99 m	19 ft 8 in	1.25 m	4 ft 1 in	13.77 m	45 ft 2 in	14.92 m	48 ft 11 in

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EFFECTIVITY: PRE-MOD. S.B. 145-32-0002
Minimum Turning Radii - (Steering Angle 57°)
Figure 202


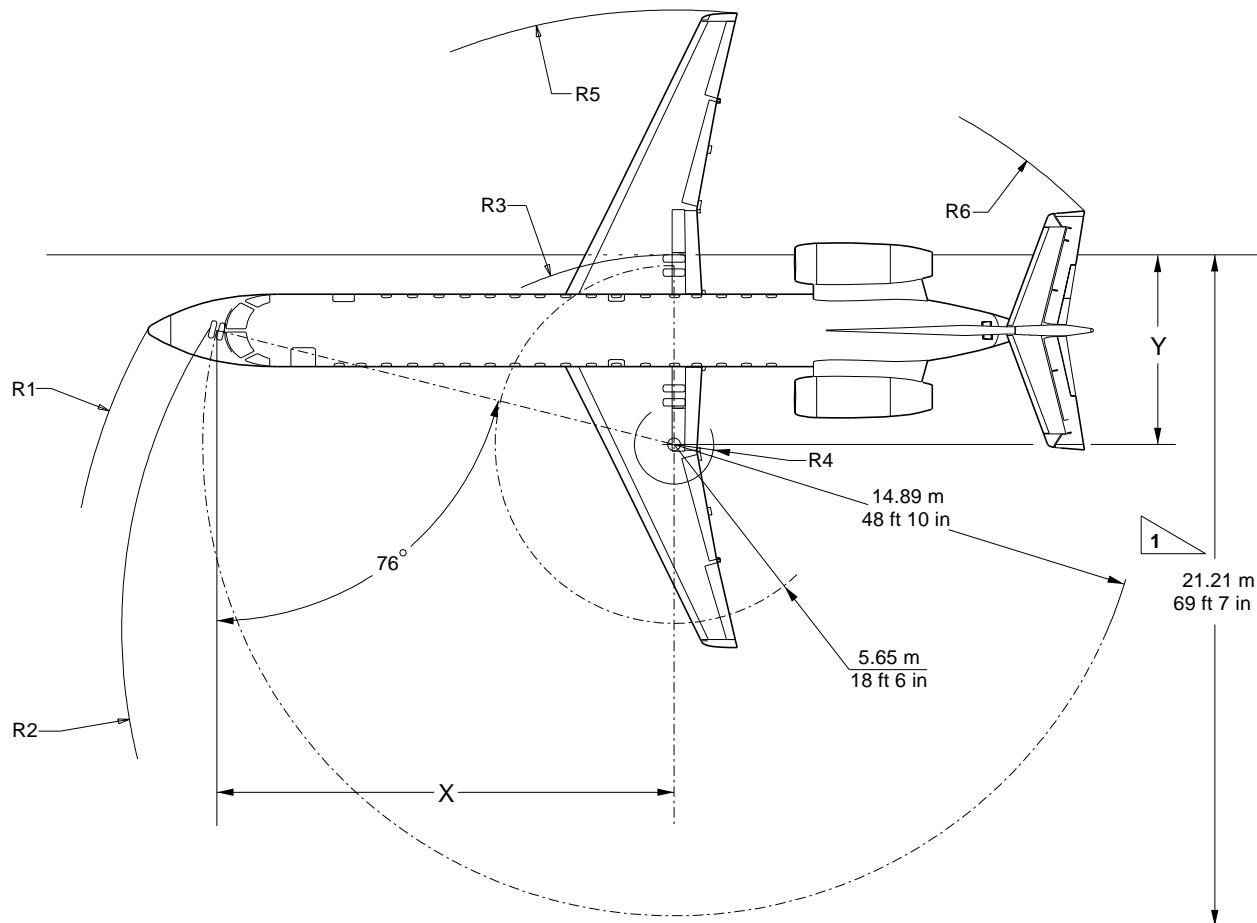
STEERING ANGLE	NOSE R1		NOSE GEAR R2		OUTBOARD GEAR R3		INBOARD GEAR R4		RIGHT WINGTIP R5		RIGHT TAILTIP R6	
57°	19.11 m	62 ft 8 in	17.45 m	57 ft 3 in	11.77 m	38 ft 7 in	7.00 m	23 ft 0 in	19.51 m	64 ft 0 in	18.47 m	60 ft 7 in

X	Y
14.45 m	47 ft 5 in

NOTE: THE CORRECT OPERATING DATA WILL BE HIGHER THAN THE VALUES SHOWN BECAUSE TIRE SLIPPAGE IS NOT INCLUDED IN THIS CALCULATION.

 PAVEMENT WIDTH FOR 180° TURN

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EFFECTIVITY: POST-MOD. S.B. 145-32-0002
Minimum Turning Radii - (Steering Angle 76°)
Figure 203


STEERING ANGLE	NOSE R1		NOSE GEAR R2		OUTBOARD GEAR R3		INBOARD GEAR R4		RIGHT WINGTIP R5		RIGHT TAILTIP R6	
76°	17.01 m	55 ft 9 in	15.11 m	49 ft 7 in	5.99 m	19 ft 8 in	1.25 m	4 ft 1 in	13.77 m	45 ft 2 in	14.92 m	48 ft 11 in

X		Y	
14.45 m	47 ft 5 in	3.6 m	11 ft 10 in

NOTE: THE CORRECT OPERATING DATA WILL BE HIGHER THAN THE VALUES SHOWN BECAUSE TIRE SLIPPAGE IS NOT INCLUDED IN THIS CALCULATION.

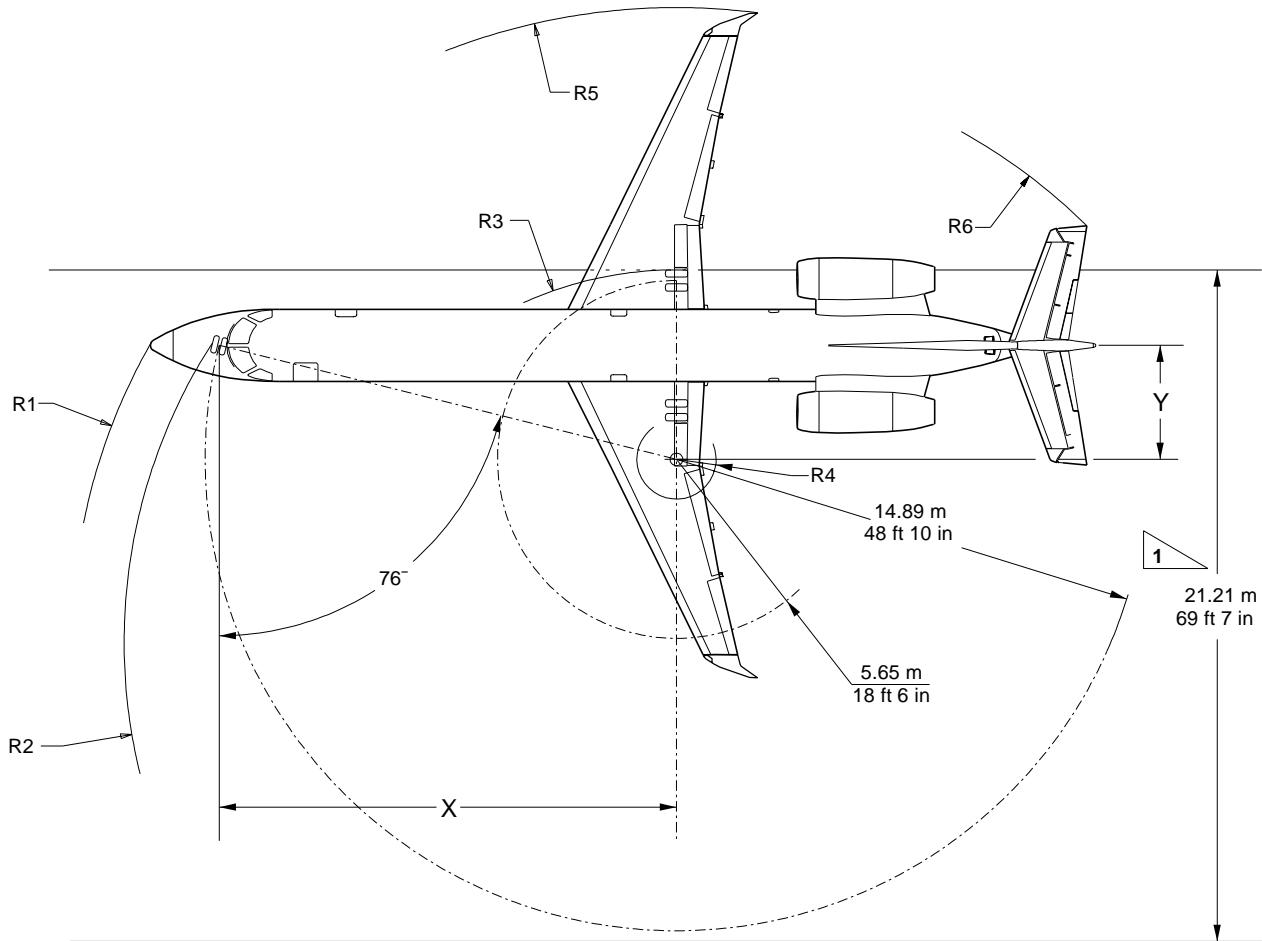
 PAVEMENT WIDTH FOR 180° TURN

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EFFECTIVITY: AIRCRAFT WITH WINGLETS

Minimum Turning Radii - (Winglet)

Figure 204



STEERING ANGLE	NOSE R1		NOSE GEAR R2		OUTBOARD GEAR R3		INBOARD GEAR R4		RIGHT WINGLET TIP R5		RIGHT TAILTIP R6	
76°	17.01 m	55 ft 9 in	15.11 m	49 ft 7 in	5.99 m	19 ft 8 in	1.25 m	4 ft 1 in	14.35 m	47 ft 1 in	14.92 m	48 ft 11 in

X		Y	
14.45 m	47 ft 5 in	3.6 m	11 ft 10 in

NOTE: THE CORRECT OPERATING DATA WILL BE HIGHER THAN THE VALUES SHOWN BECAUSE TIRE SLIPPAGE IS NOT INCLUDED IN THIS CALCULATION.

 PAVEMENT WIDTH FOR 180° TURN

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