Chapter 6—Narrow runway width calculations

6.01 Scope of Chapter 6

This Chapter:

- (a) is made for paragraph 121.220(1)(b) of CASR; and
- (b) prescribes the manner of working out the minimum width of a runway for an aeroplane.

6.02 Minimum runway width

Definitions

(1) In this section:

outer main gear wheel span, for an aeroplane, means the distance (measured in metres) between the outside edges of the aeroplane's main gear wheels.

reference field length, for an aeroplane, means the shortest take-off distance required for a take-off by the aeroplane at its maximum take-off weight:

- (a) on a runway that is level and dry; and
- (b) in still air; and
- (c) in ISA conditions at sea level.

Note:

See the CASR Dictionary for definitions of *dry* (in relation to a runway), *maximum take-off weight*, and section 1.04 in this instrument for the definition of *take-off distance required*.

- (2) The minimum width of a runway for an aeroplane is the width, of a homogenous runway surface, shown in the cell of table 6.02(2) that is the intersection of:
 - (a) the aeroplane's code letter, worked out under subsection (3); and
 - (b) the aeroplane's code number, worked out under subsection (4).

Table 6.02(2)—Minimum runway width						
Code letter	A	В	C	D	E	F
Code number						
1	18 m	18 m	23 m	-	-	=
_ 2	23 m	23 m	30 m	-	-	=
3	30 m	30 m	30 m	45 m	-	-
4	-	-	45 m	45 m	45 m	60 m

Working out the code letter

- (3) The *code letter*, for an aeroplane, is:
 - (a) if the aeroplane has a wingspan and an outer main gear wheel span mentioned in the same item in table 6.02(3) (other than an aeroplane mentioned in paragraph (c))—the letter mentioned in column 3 of the item; or

- (b) if the aeroplane has a wingspan and an outer main gear wheel span mentioned in different items in table 6.02(3) (other than an aeroplane mentioned in paragraph (c))—the letter mentioned in column 3 of the item in the table with the higher number; or
- (c) if the aeroplane has a wingspan mentioned in item 1, 2, 3 or 4 of table 6.02(3) and an outer main gear wheel span that is at least 9 m but less than 14 m—D.

Table 6.02(3)—Code letters							
Item	Column 1	Column 2	Column 3				
	Wingspan of aeroplane	Outer main gear wheel span of aeroplane	Code letter				
1	less than 15 m	less than 4.5 m	A				
2	at least 15 m but less than 24 m	at least 4.5 m but less than 6 m	В				
3	at least 24 m but less than 36 m	at least 6 m but less than 9 m	C				
4	at least 36 m but less than 52 m	at least 9 m but less than 14 m	D				
5	at least 52 m but less than 65 m	at least 9 m but less than 14 m	Е				
6	at least 65 m but less than 80 m	at least 14 m but less than 16 m	F				

Working out the code number

(4) The *code number*, for an aeroplane with the reference field length mentioned in column 1 of an item in table 6.02(4), is the number mentioned in column 2 of the item.

Table 6.02(4)—Code numbers					
Item	Column 1	Column 2			
	Reference field length	Code number			
1	less than 800 m	1			
2	at least 800 m but less than 1 200 m	2			
3	at least 1 200 m but less than 1 800 m	3			
4	at least 1 800 m	4			