

# AERONAUTICAL INFORMATION CIRCULAR 10/20

## INTRODUCTION OF THE NEGATIVE 'C' SYMBOL ON CANADIAN INSTRUMENT APPROACH CHARTS

### Introduction

TP 308, *Criteria for the Development of Instrument Procedures*, change 7.1 introduced new criteria for circling approach procedures. Under these new criteria, circling approach areas will be designed according to larger radii (R) that account for the increase in true airspeed with altitude. Because it will take time to implement the new, larger circling approach areas throughout the Canadian instrument approach procedure (IAP) inventory, a negative 'C' (white letter on black background: **C**) will be used to identify procedures that have incorporated the new, expanded circling approach radii.

### Purpose of Circular

This aeronautical information circular (AIC) is to inform Canadian airspace users of the implementation of the negative 'C' symbol on Canadian instrument approach procedure charts.

### Background

Circling is the term used to describe an instrument flight rules (IFR) procedure that is conducted by visually manoeuvring an aircraft, after completing an instrument approach, into position for landing on a runway that is not suitably located for a straight-in landing.

The visual manoeuvring area for a circling approach is determined by drawing arcs centred on each runway threshold and joining those arcs with tangent lines. The radii of the arcs are related to the aircraft category and may be based on either standard circling approach radii or expanded circling approach radii. The circling minimum descent altitude (MDA) provides a minimum of 300 feet above all obstacles within the visual manoeuvring area for each category.

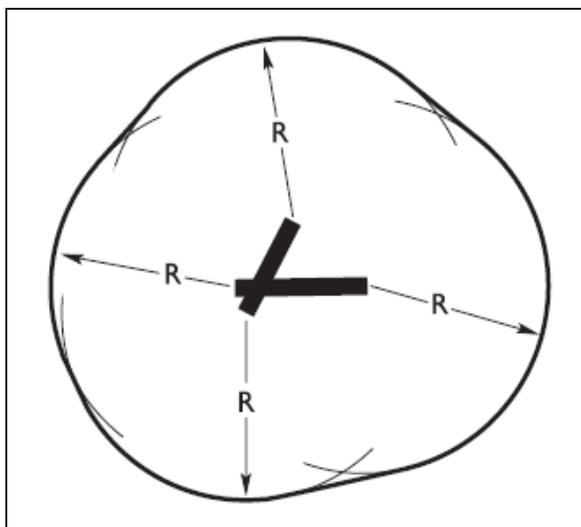


Figure 1

Circling approach protected areas developed before 2020 used the radius distances shown in Table 1. Approaches using standard circling approach areas can be identified by the absence of the **C** symbol on the circling line of minima.

**Table 1: Standard Circling Approach Radii**

Circling MDA in feet mean sea level (MSL)	Approach Category and Circling Radius in nautical miles (NM)				
	CAT A	CAT B	CAT C	CAT D	CAT E*
All Altitudes	1.3	1.5	1.7	2.3	4.5

\* Category E circling minima are published at DND aerodromes only.

Starting in 2020, circling approach protected areas will use a radius distance based on the aircraft category as well as the altitude of the circling MDA, which accounts for increases to true airspeed with altitude. Table 2 provides radius values for each aircraft category within five altitude bands. Approaches using expanded circling approach areas will be identified by the presence of the **C** symbol on the circling line of minima.

**Table 2: Expanded Circling Approach Radii**

Circling MDA in feet MSL	Approach Category and Circling Radius (NM)				
	CAT A	CAT B	CAT C	CAT D	CAT E*
1000 or less	1.3	1.7	2.7	3.6	4.5
1001 – 3000	1.3	1.8	2.8	3.7	4.6
3001 – 5000	1.3	1.8	2.9	3.8	4.8
5001 – 7000	1.3	1.9	3.0	4.0	5.0
7001 – 9000	1.4	2.0	3.2	4.2	5.3

\* Category E circling minima are published at DND aerodromes only.

**Table 3: Canada Air Pilot Minima with Expanded Circling Approach Areas**

CATEGORY	A	B	C	D
LNAV	480		(438)	1½
<b>C</b> CIRCLING	<b>640</b> (564) 1¾	<b>680</b> (604) 1¾	<b>700</b> (624)	2

## Validity

This AIC is effective 26 March 2020. For further information, please contact:

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