



HOLDING PARALLEL ENTRY

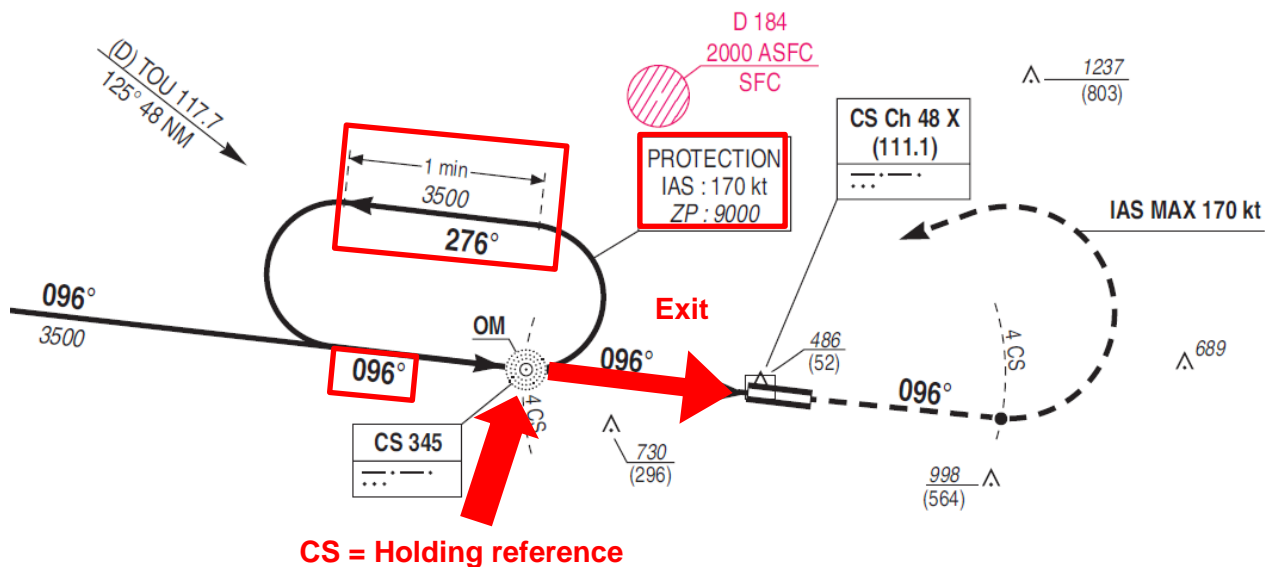
1. Introduction

This documentation will illustrate how to perform a **parallel** entry into a holding.

2. Preparatory work

2.1. Scenario and chart analysis

You will need to open the ILS Z RWY 10 charts of Carcassonne airport LFMK in France:



We will be flying the published hold over a NDB following the chart above:

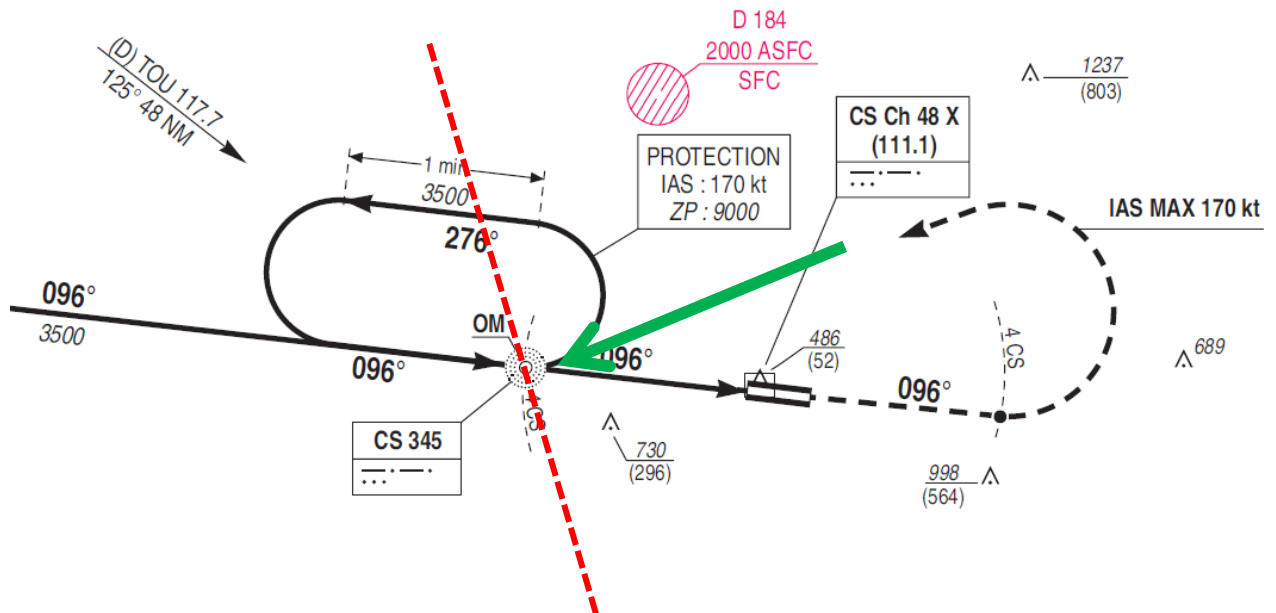
- Holding reference point is **CS NDB**
- inbound track is at heading **096° towards CS NDB** or 276° track inbound CS NDB
- altitude to maintain is **3500ft**
- outbound time is **1 minute** using heading of **276°**
- protection area impose to use maximum speed of **170KT** (maximum altitude 9000ft)
- Exit track is **96°** outbound of CS NDB

In this documentation, we will not take into account the effect of wind.

2.2. Starting situation

In this example, we will enter into the holding using the parallel entry procedure.

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1. Our aircraft will have a heading equal to 225° and direct to the NDB CS
2. We are currently at 170Kt (the maximum allowed speed to ensure holding protection)
3. We are at 3500ft
4. Do not forget to reset your time counter to 0.

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2.3. Over holding reference point : CS

Our aircraft is over the holding reference point: CS NDB.

1. RMI indicator is turning, we are over CS NDB.
2. We start a turn at outbound heading 276° just after flying CS NDB (we can also wait some seconds to give a wide berth of the inbound track)
3. When the turn at 306° heading is initiated start the timer and wait 1 minute.



2.4. End of parallel track (end of outbound)

The timer is reaching 1 minute. We should turn now toward the holding fix direct to the holding reference point (CS NDB).

1. We are near to reach 1min
2. After 1 min, we turn to the right towards CS NDB
3. With the turn progression, we continuously need to adjust the heading to make the direct to the NDB.





Note: This document presents the direct to the holding fix method. There is another method which is acceptable: it is to intercept the inbound track to the holding fix (096°).

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2.5. End of inbound leg at the holding fix

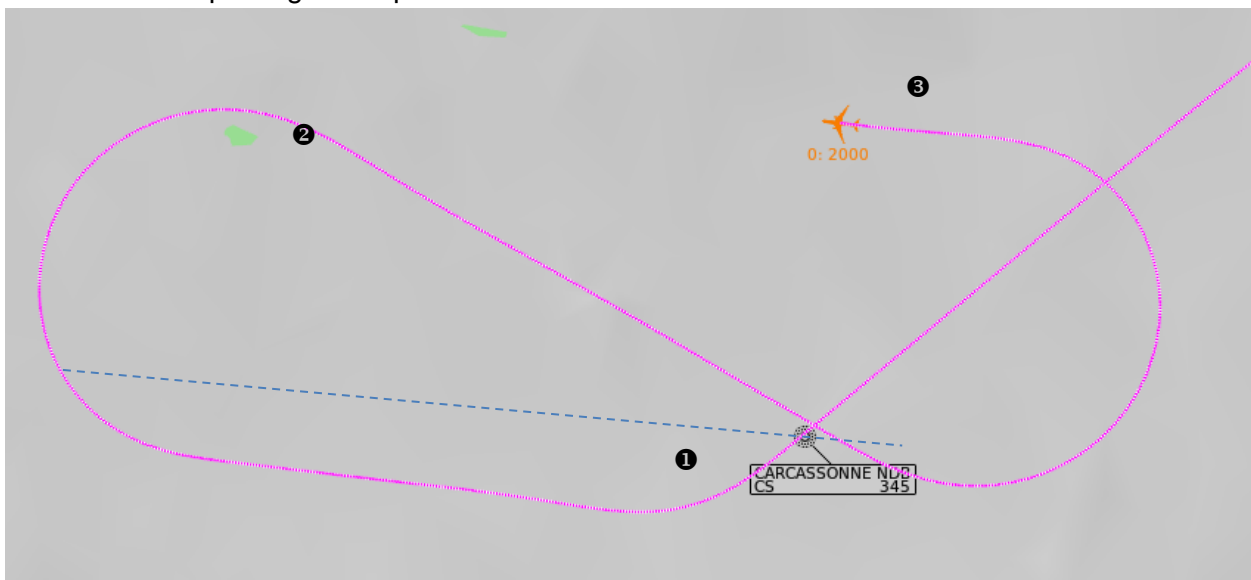
We overfly now the holding fix for the end of the holding pattern.

1. If we receive the approach clearance, or other exit clearance from ATC, we should follow the instructions.
2. If we want to continue the holding, or we do not receive any other clearance from ATC, we should perform now a direct entry holding.



3. Final plotting of the track

This is the final plotting of the performed track.



Analysis:

1. Before turning to the outbound heading, we took some time to react (few seconds)
2. We were direct to NDB CS (heading 120° for our example and can be different)
3. We continue the first half turn for a new holding pattern (direct entry).

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