



*Addendum to*

**Review of Air Traffic Services  
Montreal International (Mirabel)**

**Aeronautical Study**

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**The information and diagrams contained in this Aeronautical Study are for illustrative purposes only and are not to be used for navigation.**

## **1. Purpose**

The purpose of this addendum, to the Aeronautical Study - Review of Air Traffic Services Montreal International (Mirabel) - February/2007, is to provide procedures in support of ILS CAT II operations with regards to the implementation of a Flight Service Station at Montreal International (Mirabel).

## **2. Background :**

### Airport Markings:

Hold Lines (200 feet to the edge of the runway) that consist of two continuous yellow lines and two dashed yellow lines outlined in black, on each taxiway that has access to runway 06/24 and meet the requirement.

### Lighting:

Surface markings are supplemented by “Wig Wags” (flashing yellow lights) located on the pavement on both sides of all taxiways that have access to runway 06/24.

## **3. Procedures :**

On October 15th, 2007, representatives of NAV CANADA met with Aéroports de Montréal to agree on suitable implementation procedures when NAV CANADA closes the Airport Control Tower and opens the Flight Service Station. The NAV CANADA representatives had a tour of the manoeuvring area and observed the markings and lighting.

### Vehicle Operations:

It was agreed that procedures in regards to vehicle operations in the Airport Operations Manual will be amended to reflect that Vehicle Control Service will be provided by the Flight Service Station in the same manner as it is currently provided by the Airport Control Tower.

### Taxiways India & Juliett

Issue: Cargo traffic comes and goes in a narrow window and ground control of aircraft is a concern. Movements of large jet aircraft may result in a head to head situation on taxiways especially during IFR conditions. This could result in delay while aircraft are towed and repositioned.

### Mitigations:

- It is a CAR requirement in an MF area that prior to proceeding on the manoeuvring area pilots are to contact the ground station. A 24-hour FSS will provide Airport Advisory Service (AAS) at Montreal International (Mirabel) and

will be able to maintain an accurate traffic picture in order to provide pilots with pertinent traffic information.

- FSS will be located in the present tower building and will have the same equipment suite as the current control service.
- Taxiways India & Juliett will be designated One-way taxiways, India (westbound) and Juliett (eastbound) and marked accordingly.

Using the Risk assessment matrix the probability and consequence of surface delay and collision were assessed with the above mitigations in place. It was determined that the risk is reduced to as low as reasonably achievable (ALARA); no further mitigations are required.

### ILS CAT II:

A team was convened to assess and identify implementation procedures. The team was composed of a pilot, an air traffic controller and flight service specialists.

An airport operating restriction specified by the Minister will be published in the Canada Flight Supplement (as stated in the Aeronautical Study report):

***“During ILS CAT II operations, all aircraft must obtain IFR departure clearance prior to taxiing on the manoeuvring area”.***

Issue: The implementation of this procedure would prevent aircraft from proceeding within the ILS critical area, thus addressing safety concerns. However, the implementation of this procedure would create delays to operators and delays in getting de-icing service when required.

Assessment of amended operating restriction:

An airport operating restriction specified by the Minister will be published in the Canada Flight Supplement and in Canada Air Pilot:

***“During ILS CAT II operations, AT NO TIME SHALL A PILOT CROSS HOLD SHORT LINES, before obtaining an IFR clearance.***

This procedure will be supplemented by existing and additional mitigations:

- Local procedures will be developed for the ILS CAT II activation (see Appendix A - ATC MANOPS 346 CATEGORY II/III ILS APPROACHES);
- The IFR unit will be immediately advised when ILS CAT II is in effect;
- The IFR unit will be immediately advised by the FSS of any unauthorized ground movements;
- The IFR unit will not issue IFR departure clearances until the arrival aircraft is down and clear;

- The activation of ILS CAT II operations will be recorded on ATIS and will include information about the restriction of ground movement;
- The pilot-in-command of a VFR or IFR aircraft that is operated at an uncontrolled aerodrome that lies within an MF area shall report the pilot-in-command's intentions before entering the manoeuvring area of the aerodrome; and
- The pilot-in-command of a VFR or IFR aircraft that is departing from an uncontrolled aerodrome that lies within an MF area shall *(a)* before moving onto the take-off surface, report the pilot-in-command's departure procedure intentions; *(b)* before take-off, ascertain by radiocommunication and by visual observation that there is no likelihood of collision with another aircraft or a vehicle during take-off.

Using the Risk assessment matrix the probability and consequence were assessed with the above mitigations in place. It was determined that operational and delay risks are reduced to as low as reasonably achievable (ALARA); no further mitigations are required.

# Appendix A

## ATC MANOPS

### 346 CATEGORY II/III ILS APPROACHES

#### 346.1

Advise the IFR unit if an essential element of the Category II/III system fails. **(R)**

**346.1 Reference:** [Category II/III ILS Approaches; 140.](#)

\* **346.2 Switch to diesel generated power or confirm the availability of the alternate source of power in sufficient time to allow the Category II/III system to be serviceable if: **(N)****

\* **346.2 Note:** If a runway is placed on Category II/III status, the on-site diesel generator or, where available, the alternate source of power becomes the primary source of power.

ATC 3-41

A. the approach runway is a Category II/III ILS runway;

B. you have received an estimate on an inbound flight; and

C. the following conditions exist or are anticipated:

1. ceiling of less than 200 feet; or
2. RVR reading of less than 2,600 feet.

#### 346.3

Operate airport lighting in accordance with section [370](#), except that, during weather conditions which may cause the lights to ice over, the centreline and touchdown zone lights may be left off until the aircraft is by the outer marker or final approach fix on final. **(R)**

**346.3 Reference:**

[Runway Lights; 374.](#)

#### 346.4

Hold aircraft or vehicles at least 250 feet from a functioning ILS transmitter while a Category II/III ILS approach is being conducted.

#### 346.5

After an arriving aircraft has passed the FAF during a Category II/III ILS approach, do not authorize aircraft or vehicles to proceed:

A. onto the runway to which the aircraft is conducting the CAT II/III approach; or

B. within designated areas where their presence will or may affect ILS signals.

**(N)**

**346.5 B. Note:**

[It is the responsibility of the Airport Operator to arrange for an effective method of regulating vehicular traffic crossing approach paths and to designate the areas where the presence of aircraft or vehicles will or may affect ILS signals.](#)

#### 346.6

Inform the ACC when landing aircraft have taxied clear of the runway and ILS critical area if the ASDE is not functioning during category III ILS operations. **(R)**

**346.6 Reference:**

[Category III ILS Approaches; 535.](#)

## **Appendix B**

Distances from the FSS

&

Airport diagram



FSS

Mirabel

2500ft

700 ft

1100ft

2300ft

2500ft

3500ft

WigWag

Marking:  
2 continuous yellow lines  
2 dashed yellow lines  
outlined on black



Cargo Operators

CLOSED

Nolinor

Uncontrolled  
taxiway

Mirabel