

Chapter 15  
RECOMMENDATIONS

## Section 1. IFR TRAFFIC SERVICES IN QUEBEC

The Commission recommends that air traffic control services provided for IFR flights within the present Montreal FIR be available in both official languages, subject to the following conditions:

- That implementation follow or be concurrent with implementation of air traffic control services in both languages for VFR flights in the Dorval PCZ and the Mirabel PCZ.

- That before the service is provided, ANO Series I, No. 1 be amended to authorize bilingual communications for:

- a) IFR air-ground communications in the Montreal FIR
- b) the Dorval PCZ (VFR)
- c) the Mirabel PCZ (for landing and departing VFR aircraft)

- That an implementation team be established before the service is provided, and maintained for a minimum period of one year after implementation. This team should be authorized to issue directives consistent with implementation policies and be directed to closely monitor the application of procedures for compliance.

The implementation team would:

- monitor implementation activities
- ensure application of procedures
- ensure adequacy of procedures
- identify new requirements
- maintain contacts with the aviation community
- conduct in-flight and tape monitoring programmes
- investigate language related complaints
- attend all fact-finding boards into operating irregularities that occur in Quebec.

- That implementation of bilingual communications in IFR in Quebec be restricted to air traffic control units located in Quebec.

- That before the service is provided training programmes related to the French lexicon and practical application of bilingual communications be undertaken based on the following criteria:

a) Current controller and supervisor staff  
(certified for bilingual ground-ground communication)

i) Concentrated lexicon review and practical training in IFR air-ground phraseology for a minimum of 5 days leading to certification.

NOTE: This may be reduced for those already trained for simulation purposes and those with prior experience.

ii) Concentrated lexicon review and practical training in VFR air-ground phraseology for a minimum of 3 days leading to certification.

b) New controller recruits

i) Recruits to be certified bilingual in accordance with Public Service Commission standards at level BBCC prior to attending basic controller training.

ii) All controller training programmes from basic training through advanced training be given in a bilingual format for both classroom and practical sessions.

c) All controllers

That the annual refresher training programme incorporate an appropriate review of lexicon terms and phraseology.

- That before the service is provided, procedures reviewed in other parts of this Report relating to the subjects enumerated below be certified, taking whatever steps are required, including simulation should it be deemed necessary:

- a) Language identification on flight data strips.
- b) Replacement of strip when language changes from French to English.
- c) Exchange of traffic in the holding pattern.
- d) Exchange of traffic for merging targets.
- e) Relay of clearances in language of pilots.
- f) Use of phonetics for civil aircraft.

g) Use of phonetics for identification of low frequency airways and air routes.

h) Identification of VHF airways.

i) Use of language initially chosen by pilot unless requested to change.

j) Inadvertent use of wrong language by controller.

k) Inadvertent use of wrong language by pilot.

l) Initial radio contact where pilot language unknown.

m) Relay of clearances by pilot of another aircraft.

n) Coordination of language between two IFR units.

o) Coordination of language between IFR units and towers and aeradio stations.

p) Clearance readbacks.

q) Provision at each control position of plasticized reference cards containing air traffic control phraseology not frequently used. Such information may be displayed by other appropriate methods, such as OIDS, when available.

r) Local procedures for unilingual French pilot forced into English only airspace.

s) Provision by the Montreal Terminal Arrival Controller to tower controllers of information on the position of all arriving IFR aircraft.

- That the procedure requiring the use of individual digits for altitudes be enforced. (Paragraph 2312.4 of MANOPS)

- That before the service is provided, ANO Series I, No. 1, be amended to advise pilots of their responsibility to ensure that their communication skills are consistent with the language services provided by air traffic units controlling airspace within which they undertake controlled flights.

- That Transport Canada investigate the establishment of an aviation safety reporting programme for the voluntary reporting of incidents, hazards and discrepancies in the Canadian aviation system. Such a programme should be administered by an independent agency.

-That a continuing programme be established with the objective of reducing the frequency of all types of errors (including language errors) in air-ground communications. This programme should be directed at developing increased emphasis on communication accuracy through establishment of minimum standards, improved training methods, supervision and monitoring programmes.

-That before the service is provided, the Department of Transport arrange for broader distribution of Lexicon TP 415 for pilots. In addition, the audio-visual presentation and audio training tapes on the proper use of French phraseology should be provided to flying clubs which operate ground schools for pilots, and to Quebec-based aviation associations.

- That a direct override access to hotlines be provided for the coordinator position at the Quebec Terminal Control Unit.

-That before the service is provided, a new Aviation Notice be published describing the expansion of bilingual services, and encouraging pilots (a) to be thoroughly familiar with air traffic control terminology of the language selected and (b) not to change language during flight without formally indicating their intention to the controller.

- That the Air Traffic Services Branch maintain a continuing review of the operational deficiencies identified during the Bilingual IFR Communications Simulation Studies.

- That further studies be conducted to determine the most effective method of indicating language of communications as part of the information tag incorporated in the automated air traffic system JETS which is planned for installation over the next two years.

- That before the service is provided the following publications be made available in both official languages:

Radio Navigation Charts:  
Enroute Low Altitude  
Enroute High Altitude  
Terminal Area

IFR Supplement

Canada Air Pilot (East)

The Commission further recommends that bilingual IFR air traffic services be expanded to coincide with each phase of the expansion of the Montreal FIR, subject to the following condition:

- That the French language be made available on request at the Magdalen Islands; in south-western Quebec, north-west of Ottawa; and in the area over Quebec above FL 290, east of Sept-Iles or approximately 70°W., to the extent that any such airspace has not already been included in the expanded Montreal FIR.

## Section 2. VFR FLIGHTS AT DORVAL

The Commission recommends that air traffic control services in both official languages be made available within the Dorval PCZ for VFR flights, subject to the following conditions:

- That before the service is provided, ANO Series I, No. 1, be amended accordingly.
- That before the service is provided, a NOTAM be distributed specifying the extent to which bilingual services will be available at the Dorval airport. The NOTAM should be available 3 to 4 weeks before the introduction of bilingual air/ground communications at Dorval.
- That before the service is provided, the training programmes related to the French lexicon and to the practical application of bilingual communication, all as described in the recommendations of Chapter 9, be undertaken by VFR controllers to the extent applicable.
- That before the service is provided, pertinent Operations Letters be amended to incorporate new procedures.
- That before the service is provided, the procedures enumerated in the recommendations of Chapter 9 be certified, except for such procedures as are related exclusively to IFR Air Traffic Services.
- That the procedure requiring the use of individual digits for altitudes be enforced. (Paragraph 2312.4 of MANOPS)
- That before the service is provided, ANO Series I, No. 1, be amended to advise pilots of their responsibility to insure that their communication skills are consistent with the language of services provided by air traffic units controlling airspace within which they undertake controlled flights.
- That before the service is provided, the Department of Transport arrange for broader distribution of Lexicon TP 415 for pilots. In addition the audio-visual presentation and audio training tapes on the proper use of French phraseology should be provided to flying clubs which operate ground schools for pilots, and to Quebec-based aviation associations.
- That before the service is provided, a new Aviation Notice be published describing the expansion of bilingual services, and encouraging pilots (a) to be thoroughly familiar with air traffic control terminology of the language selected and (b) not to change language during flight without formally indicating their intention to the controller.

- That before the service is provided, an Airport Control No. 2 position be implemented.
- That before the service is provided, two dual channel ATIS recorders be installed in the Dorval Tower, each recorder being on a specific frequency. Both messages should be recorded before broadcasting begins.
- That the use of the ATIS by VFR aircraft be promoted. Such use could be promoted by posters advertising the service at flying clubs in the area, or by controllers requiring pilots to monitor the ATIS message before they are permitted to enter the Dorval control zone or the Montreal TRSA.
- That after the introduction of bilingual air/ground communications, the overall tower operation be monitored closely to detect and to rectify any problems.

### Section 3. VFR FLIGHTS AT MIRABEL

The Commission recommends that air traffic control services for VFR flights in the Mirabel Positive Control Zone be provided in both official languages, subject to the following conditions:

- That before the service is provided, ANO Series I, No. 1 be amended accordingly.
- That before the service is provided a NOTAM be distributed specifying the extent to which bilingual services will be available at the Mirabel airport. This NOTAM should be available 3 to 4 weeks prior to the introduction of bilingual air/ground communications at Mirabel.
- That before the service is provided, the training programmes related to the French lexicon and to the practical application of bilingual communication, all as described in the recommendations of Chapter 9, be undertaken by VFR controllers to the extent applicable.
- That before the service is provided, the procedure enumerated in the recommendations of Chapter 9 be certified, except for such procedures as are related exclusively to IFR Air Traffic Services.
- That the procedure requiring the use of individual digits for altitudes be enforced (Paragraph 2312.4 of MANOPS).
- That before the service is provided ANO Series I, No. 1 be amended to advise pilots of their responsibility to insure that their communication skills are consistent with the language of services provided by air traffic units controlling airspace within which they undertake controlled flights.

- That before the service is provided, the Department of Transport arrange for broader distribution of Lexicon TP 415 for pilots. In addition, the audio-visual presentation and audio training tapes on the proper use of French phraseology should be provided to flying clubs which operate ground schools for pilots, and to Quebec-based aviation associations.

- That before the service is provided, a new Aviation Notice be published describing the expansion of bilingual services, and encouraging pilots (a) to be thoroughly familiar with air traffic control terminology of the language selected and (b) not to change language during flight without formally indicating their intention to the controller.

- That the use of the ATIS by VFR aircraft be promoted. Such use could be promoted by posters advertising the service at flying clubs in the area, or by controllers requiring pilots to monitor the ATIS messages before they are permitted to enter the Mirabel control zone or the Montreal TRSA.

#### Section 4. UNCONTROLLED AIRSPACE

The Commission recommends that the existing communication capability be expanded within the shortest possible delay to provide coverage within all the uncontrolled airspace in Quebec. With regard to the northern part of the Province, such coverage should be provided before, or at the latest, concurrently with, the expansion of the Montreal FIR to the north (NASP-E). With regard to the eastern part of the Province, such coverage should be provided before, or at the latest, concurrently with, the expansion of the Montreal FIR to the east (Odynski Study).

The Commission further recommends that a study be undertaken as soon as possible to determine the most appropriate way to provide air traffic services in uncontrolled airspace in Quebec.

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