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Radiocommunication Information Circular

Guide for Examiners Conducting Examinations for the Restricted Operator Certificate With Aeronautical Qualification

Preface

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All Spectrum Management and Telecommunications publications are available on the following website: <http://ic.gc.ca/spectrum>.

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1. General

This circular explains how to become a recognized Canadian Accredited Examiner and how to conduct examinations for the Restricted Operator Certificates with Aeronautical Qualification (ROC-A).

The *Radiocommunication Act* and its *Radiocommunication Regulations* require operators of radio stations in Canada, on board aircraft, or land or mobile stations communicating with aircraft stations on aeronautical frequencies, to hold a valid ROC-A. This certificate is issued by Industry Canada to those persons who pass an examination administered by either Industry Canada or an accredited examiner.

No fees will be levied by accredited examiners on behalf of Industry Canada for administering the ROC-A examination. Industry Canada does not charge a fee for issuing the ROC-A. All examinations are to be administered in person in Canada and the department expects the accredited examiners to conduct themselves professionally. Failure to comply will result in the termination of accreditation.

2. Accredited Examiners

2.1 Qualifications

Persons who may qualify as accredited examiners must hold a ROC-A and work in the Canadian aeronautical industry in positions such as Canadian flying instructors, check-pilots, employees of an airline company or Transport Canada.

2.2 Accreditation Process

Interested persons should apply online for examiner accreditation by visiting our website www.ic.gc.ca/radio-operator and creating a user account and then completing the online application form, found under “Accredited Examiner”, or by contacting Industry Canada’s Radio Operator Certificate Service Centre (ROCSC). The contact information for the Centre is in Section 5.1 of this document. After receiving the request, an appointment will be scheduled to attend a briefing session with an Industry Canada official. This briefing consists of an interview to determine if the applicant should be accepted as an accredited examiner. If found acceptable, training on the examination content, format, and how to complete the necessary forms so that a certificate may be issued by Industry Canada will be provided by the ROCSC.

If accepted, an accredited examiner will receive a package by email from the ROCSC. The package will contain a Letter of Accreditation, their unique examiner number, a sample exam and the required forms and procedures for online submissions. The accreditation will permit them to administer ROC-A examinations on behalf of Industry Canada for no more than three years.

Examiners seeking to renew their accreditation should confirm their continued involvement or employment in the aeronautical industry.

2.3 Program Audit

In order for Industry Canada to control the quality of the examinations administered in Canada, examiners may be asked to periodically administer an examination in the presence of an Industry Canada official. In addition, a survey using the examined candidates may also be done.

3. Candidate Requirements

3.1 Eligibility

There are no nationality or age restrictions as to who may take the examination for the ROC-A.

3.2 Language

Candidates must demonstrate proficiency in English or French. However, please note that the language for international aviation is English.

3.3 Ability

Candidates must be able to safely operate radiotelephone equipment. Candidates will, when completing Form IC2382, *Application for Radio Operator's Certificates* (see Appendix A), certify that they have no disabilities that could impair their ability to safely operate a radio station. If an examiner observes any condition that could adversely affect the candidate's ability to operate a station safely, especially hearing impairments, the candidate should be referred to the ROCSC. The contact information for the Centre can be found in Section 5.1.

3.4 Proof of Identity

Photo identification must be presented at the examination. A passport, driver's licence or other government-issued photo identification is acceptable as proof of identity, at the discretion of the examiner. A combination of picture identification and other documentation can also be used; for example, an applicant could present a student identification card and a birth certificate.

4. Examination

4.1 Content

The examination for a Restricted Operator Certificate is based on RIC-21, *Study Guide for a Restricted Operator Certificate with Aeronautical Qualification*. The candidate must be able to:

- operate radiotelephone equipment;
- demonstrate general knowledge of radiotelephone operation and procedures, and international regulations applicable to radiotelephone communications between stations and, in particular, regulations relating to safety; and
- demonstrate general knowledge of the *Radiocommunication Act* and the regulations as they apply to the aeronautical service.

4.2 Format

The examination may be in the form of a verbal examination, a written examination, or a combination of both. Typically, the examination has two sections:

- **Practical Test**

A simulated situation where the candidate acts as a radiotelephone operator of an aircraft or aeronautical land station and transmits a message of approximately fifteen words using correct calling and operating procedures. See Appendix B for an example. And

- **Operating Procedures and Regulations**

A test of the candidate's knowledge of the procedures and regulations outlined in Appendix C.

5. Form IC2382 - Application for a Radio Operator's Certificate

5.1 Instructions for Completion of the Application for an ROC-A

The information provided on this form is used by Industry Canada to issue the appropriate certificate, maintain certificate records and collect statistical information.

Ensure the candidate prints clearly when completing the section dealing with name, address, city, postal code, telephone number and date of birth. Examiners should verify the completed application with the candidate's proof of identity information at the time of the examination.

Note that a Canadian mailing address is required as Industry Canada will not mail the certificate to another country. If a candidate can't provide a Canadian mailing address, they must check the "International Address" box and their certificate will be mailed to the examiner's address. The candidate needs to be notified of this and make mutually acceptable arrangements with the examiner to obtain their certificate.

In the field labelled "Date of Birth", please ensure the candidate enters their date of birth using the format (yyyy- mm-dd).

Use the check boxes to select the class (choose "ROC-A"), the preferred language and indicate whether this is a first examination or a re-examination. The candidate must sign and date the application using the format (yyyy-mm-dd).

The box below the candidate's signature is for use by the accredited examiner. As an accredited examiner, please print your full name clearly where indicated, include your examiner number and sign the form.

This form should be forwarded to the Radio Operator Certificate Service Centre (ROCSC) within seven days of the examination for all successful candidates. As the examiner, you must make a copy of this application for your records. The Department does not keep records concerning unsuccessful candidates therefore, their applications should not be forwarded.

The contact information for the Centre is:

Industry Canada
Radio Operator Certificate Service Centre
2 Queen Street East
Sault Ste. Marie, ON P6A 1Y3
Telephone: 1-877-604-7493 or 705-941-2001
Fax: 1-877-604-7491 or 705-941-4607
Email: spectrum.certificates@ic.gc.ca
Hours of Operation: 8:30 a.m. to 4:30 p.m. (Eastern Time)

5.2 Instructions for submitting applications online

Examiners can decrease application processing time by submitting applications online at:
www.ic.gc.ca/radio-operator.

Examiners can submit applications online after creating their user account and selecting the link "Accredited Examiners" and then "New Professional Certificate Application." The form IC2382, *Application for a Radio Operator's Certificate*, will need to be scanned and attached to the online submission. Please do not include a copy of the identification attached with the submission.

5.3 Exchange Certificate

Examiners should be aware that Canada does not currently have any reciprocal certificate exchange agreements with other countries. This means that Canada will not provide a Canadian certificate unless the candidate successfully completes the Canadian ROC-A examination. Industry Canada offers no implied or expressed guarantee that a foreign administration will provide a certificate exchange for Canada's ROC-A. Also, Industry Canada will not provide additional documentation in order to satisfy foreign administrations.

5.4 Service Standards

The service standards for processing applications for a Radio Operator's Certificate with Aeronautical Qualification (ROC-A) are available at:
<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08802.html>.

Appendix A - (Form IC2382)

		Industry Canada / Industrie Canada		APPLICATION FOR A RADIO OPERATOR'S CERTIFICATE		<input type="button" value="Save As"/> <input type="button" value="Print"/> <input type="button" value="Reset"/>	
Family Name			Given Name			CLASS	
Address (Street, P.O. Box, etc.)			City and Province			Check appropriate box(es) (*Photograph required) *P3 <input type="checkbox"/> GOC R/O <input type="checkbox"/> ROC - MC RI -1 <input type="checkbox"/> ROC - A (AERO) RI - 2 <input type="checkbox"/> ROC - M (MARI)	
Postal Code	Telephone Number	Date of Birth (YYYY-MM-DD)	Language		<input type="radio"/> English <input type="radio"/> French		
					<input type="radio"/> First Examination <input type="radio"/> Re-Examination		

The above information is true to the best of my knowledge and I certify that I have no physical disabilities that would impair my abilities to safely operate a radio station.

Applicant's Signature						Date (YYYY-MM-DD)			
ACCREDITED EXAMINER AND / OR INSTITUTE USE ONLY									
Name of Accredited Examiner and / or Institute									
1 <input type="radio"/> New		2 <input type="radio"/> Replacement		3 <input type="radio"/> Amendment		4 <input type="radio"/> Deletion		5 <input type="radio"/> Incomplete	
Reporting Unit	Transaction	Class	Cert.	Type	Number	Certificate Date (YYYY-MM-DD)	Endors.	C	Validation Date (YYYY-MM-DD)
Examiner's Signature							Expiry Date (YYYY-MM-DD)		

INSTRUCTIONS

1. Certificates requiring a photograph are validated every five years and re-issued every ten years.
2. When writing an examination for a GOC, please provide one recent photo.
3. Identification must be presented at the examination. This may be a birth certificate, a baptismal certificate, a citizenship certificate, a landed immigrant identification card or a declaration of nationality status.
4. All information provided on this form will be stored in personal information bank number IC-PPU-021. Information of a personal nature will be protected under provisions of the *Privacy Act*. Other information in the personal information bank may be released in accordance with the *Access to Information Act*.

Appendix B - Practical Test

Note: The following exchange of messages should be spoken clearly and concisely using standard phraseology whenever practical.

In practical radio use, when engaged in a back and forth conversation, the aeronautical station and aircraft station would not normally identify each and every time. Anytime there is a break in the communication and they want to engage again, then they would re-identify.

1. Aircraft C-FWZU establishes communications with Schefferville Radio and requests clearance to land.

Candidate:	Schefferville Radio This is Cessna 172 Charlie Foxtrot Whiskey Zulu Uniform Over
Examiner:	Whiskey Zulu Uniform This is Schefferville Radio Go ahead Over
Candidate:	Schefferville Radio This is Whiskey Zulu Uniform Four miles at one thousand Landing Schefferville Over
Examiner:	Whiskey Zulu Uniform This is Schefferville Radio Roger Wind - one six zero at one five Altimeter - two niner niner seven Over
Candidate:	Schefferville Radio This is Whiskey Zulu Uniform Roger

2. Flight Information Centre North Bay Radio is called by aircraft C-GRFV requesting latest weather.

Examiner:	North Bay Radio This is Cessna 172 Charlie Golf Romeo Foxtrot Victor Over
Candidate:	Romeo Foxtrot Victor This is North Bay Radio Go ahead
Examiner:	This is Romeo Foxtrot Victor Requesting the latest weather for North Bay
Candidate:	Romeo Foxtrot Victor This is North Bay Radio North Bay Ceiling 2000 overcast Visibility 10 miles Very light snow Temperature -21 Dew point -23 Wind 240 degrees magnetic at 16 Altimeter 2999 Clouds Stratocumulus 10 tenths Over
Examiner:	North Bay Radio This is Romeo Foxtrot Victor Roger, out

Appendix C - Operating Procedures and Regulations

Note: You may use the following sample questions when giving this part of the examination. Multiple choice examinations are also available from Industry Canada ROCSC.

Sample Oral Procedure Questions

1. What precautions must an operator take before calling or making a transmission?
2. Give an example of a call from an aircraft station to a control tower.
3. Give an example of how you would reply to a call from a control tower.
4.
 - (a) How is a radio station identified?
 - (b) When an operator is uncertain of the identification or call sign of the calling station, what is the procedure to be taken?
5.
 - (a) What precautions are to be taken before making test signals?
 - (b) How long may test signals continue?
6. Give an example of how you would request a signal check from a control tower.
7. Give an example of a reply to a request for a signal check from a control tower.
8. What do the following expressions mean?
OUT; ROGER; SAY AGAIN; WORDS TWICE; CORRECTION; OVER.
9. Using the phonetic alphabet spell (select a word). When should this alphabet be used?
10.
 - (a) How is a message acknowledged?
 - (b) What is the procedure used to obtain repeat of a message?
 - (c) What is the correct procedure for making corrections to a message?

Sample Radio Regulations Questions

1.
 - (a) What does the spoken word "MAYDAY" indicate?
 - (b) Give an example of a distress call.
2.
 - (a) What information should be given in a distress message?
 - (b) Give an example of a distress message.
3.
 - (a) On what frequency would you transmit a distress call?

- (b) If you did not receive an answer to a distress message sent on a distress frequency, can another frequency be used?
- 4. Assuming that your station was no longer in distress, how would you notify or advise other stations that the distress situation has ended?
- 5.
 - (a) What action would you take if you heard a distress call?
 - (b) Give an example of an acknowledgement of a distress message.
 - (c) What precautions would you take to prevent interference to distress traffic?
 - (d) What station is the controlling station during a distress incident?
- 6.
 - (a) What is the spoken word for the urgency signal?
 - (b) What does the urgency signal indicate?
 - (c) What priority has the urgency signal over other communications?
- 7.
 - (a) What procedure would you follow if you heard the urgency signal?
 - (b) How long would you continue to listen after hearing the urgency signal?
 - (c) Give an example of an urgency message addressed to:
 - 1. a specific station
 - 2. all stations
- 8. What kind of language is not permitted in the exchange of radiocommunication?
- 9. What authorization is required to establish a radio station?