

CANADIAN OWNERS AND PILOTS ASSOCIATION

The COPA Guide to the Owner-Maintenance Category



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Background

The Owner-Maintenance Category was developed to allow certain older certified fixed-wing gliders and single engine airplanes to be maintained and restored under similar regulations as amateur built aircraft.

The proposal for this category grew from a cross-Canada series of town hall meetings for pilots conducted by Transport Canada recreational aviation specialist Lindsay Cadenhead during 1994-95.

During the meetings, recreational aircraft owners expressed their concern for the spiraling cost and lack of availability of certified parts and AME expertise for older, out of production aircraft.

This concern was turned into a proposal from several aviation associations, including COPA. It called for a new category for these aircraft that would allow owner-maintenance, part substitution and limited aircraft modification.

An "Owner-Maintenance Category" became part of Transport Canada's new Recreational Aviation Policy in June 1996. That policy was accepted by the aviation community and approved by the Minister of Transport.

During 1998 and 1999, the Owner-Maintenance Aircraft Category had passed through the CARAC Part V Technical Committee but stalled in the Department of Justice during the rule-making process.

Feedback from more than 400 COPA members identified the importance of the new category. In February 2000, Transport Canada issued ministerial exemptions to provide for the issue of a Flight Permit – Specific Purpose – Owner-Maintenance.

In March 2002 the new rules entered the CARs and the exemption phase ended. Aircraft in this category now qualified for a Special Certificate of Airworthiness – Owner-Maintenance.

Scope of This Guide

This COPA Guide is designed to give you the background information that you will need to get involved in O-M aircraft, whether you are buying an aircraft already in the category of going through the process of converting a certified aircraft to an O-M aircraft. This Guide will cover some of the pitfalls, regulations and choices available. It is designed to get you started!

This COPA Guide is **not** designed to tell you how to do maintenance on an O-M aircraft. That is a big subject and it is best covered in specialized (and much thicker) books than this!

Note

This guide contains information of a general nature only. While this guide does discuss the rules for maintaining and flying an owner-maintenance aircraft it is not legislative. Ensure that you read and understand the current CARs before

commencing work on an owner-maintenance aircraft.

The Minister of Transport is the final authority for determining the acceptability of data. <u>BEFORE commencing any</u> <u>work,</u> contact Civil Aviation Safety Inspector at the Transport Canada Centre (TCC) most convenient to you. To find the nearest TCC: <u>www.tc.qc.ca/eng/regions.htm</u>.

Under the O-M Category, Aircraft Pilot/Owners are Eligible To:

- maintain an airplane
- conduct and sign for the annual inspection
- refurbish all or part of an airplane
- overhaul all or part of an airplane
- install certified and uncertified parts
- install or replace any instruments or avionics
- modify an airplane within certain limits
- rebuild an airplane that is out of service
- sign the maintenance release.

The pilot/owner pilot can do any work on an airplane or hire someone (such as an AME, amateurbuilder or anyone else) to do the work for the owner/pilot. Either an AME or the pilot/owner can then sign the maintenance release.

Changing the Rules

The following CARs were some of those that were affected by the creation of this category and outline some of the privileges and benefits:

- <u>CAR 507.10</u> The pilot/owner of an O-M Category aircraft no longer has to have inspections performed or supervised by an AME.
- <u>CAR 571.06</u> The pilot/owner can sign the maintenance release for a major repair or overhaul on an O-M aircraft and only needs to show that the repair conforms to the requirements of "acceptable data".

Sources of "acceptable data" include, but are not limited to:

- Drawings and methods recommended by the manufacturer of the aircraft, component, or appliance
- STC documents for that type or other types of aircraft
- Transport Canada advisory documents;
- <u>FAA Advisory Circular 43.13-1B Acceptable Methods, Techniques & Practices- Aircraft</u> <u>Inspection and Repair</u>, and <u>FAA Advisory Circular 43.13-2B Acceptable Methods, Techniques</u>, <u>and Practices - Aircraft Alterations</u>
- UK CAA Civil Aircraft Inspection Procedures (CAIP),
- JAA Advisory Circulars, (ACJ) and

- COPA
- Publications issued by recognized authorities on the subject matter concerned.
- Pilot/Owners may devise their own data, which need not be approved, but must be subject to an appropriate level of review or analysis, or be shown to comply with recognized industry standards, or commonly accepted practice.

Changes that affect the structural strength, performance, power plant operation, or flight characteristics of an aircraft must be reported to the Minister before further flight of the aircraft; such changes may require re-evaluation to confirm that the aircraft continues to comply with the applicable standards.

The Minister of Transport is the final authority for determining the acceptability of data. **<u>BEFORE commencing any work</u>**, contact a Civil Aviation Safety Inspector at the Transport Canada Centre (TCC) most convenient to you. To find the nearest TCC: <u>www.tc.gc.ca/eng/regions.htm</u>.

- <u>CAR 571.10</u> and <u>CAR 571.11</u> The owner of an O-M aircraft, who is a pilot, can sign all the maintenance releases for the aircraft using the following wording: "The described maintenance has been performed in accordance with the applicable airworthiness requirements."
- <u>CAR 571.07</u> The pilot/owner can install new and used certified and uncertified parts on an O-M aircraft.
- <u>STD 507.06(13)(a)</u> The pilot/owner of an O-M aircraft may apply for a *Special Certificate of Airworthiness Owner-Maintenance* without having to have available an approved Aircraft Flight Manual or approved operating limitations.
- <u>STD 571.13</u> Aircraft in the O-M category are excluded from the requirement that only those parts specified in the type design of the aeronautical product are eligible for installation on that product.
- <u>CAR 605.84</u> Pilot/owners of aircraft operated under a *Special Certificate of Airworthiness Owner-Maintenance* are not compelled to comply with Airworthiness Directives or to operate in accordance with airworthiness limitations applicable to the type design for the aircraft although they may voluntarily do so.
- <u>CAR 605.92</u> Pilot/owners of aircraft operated under a *Special Certificate of Airworthiness Owner-Maintenance* are allowed to keep the required technical record reports in the Journey Log rather than keeping one or more technical records.

Ensure that you read and understand the current CARs and <u>BEFORE commencing any work</u> on an owner-maintenance aircraft contact a Civil Aviation Safety Inspector at the Transport Canada Centre (TCC) most convenient to you. To find the nearest TCC: <u>www.tc.gc.ca/eng/regions.htm</u>.

Eligible Aircraft

To be eligible for the Owner-Maintenance Category, the aircraft model must appear on the Transport Canada list of O-M airplanes (Appendix A to this guide).

To add a new aircraft to the list it must meet the following requirements:

(i) the aircraft is of a type certified in accordance with small airplanes, gliders, and powered gliders, or an equivalent foreign standard;

(ii) the aircraft type certificate does not authorize more than four occupants;

(iii) the maximum certificated take-off weight (MCTOW) of the aircraft does not exceed 1,814 kg (4,000 pounds);

(iv) the aircraft is of a type and model that has not been manufactured during the 60 months preceding the date of application;

(v) fewer than 10% of Canadian aircraft of the type and model concerned are operating in Canadian commercial air service at the time of application;

(vi) the aircraft type and model is powered by a single, normally aspirated, piston engine, and is unpressurized; and

(vii) except for gliders, powered gliders or aircraft with airframes of wooden construction, the aircraft type and model has a fixed landing gear and a fixed pitch propeller. (Ground adjustable propellers are considered fixed pitch propellers)

A request to add a new aircraft to the list should be made in writing (on paper or via e-mail) to:

Transport Canada, Director - Aircraft Maintenance and Manufacturing – AARP, Tower C, Place de Ville 2nd Floor, 330 Sparks Street, Ottawa, Ontario K1A 0N8

The technical responsibility for recreational aircraft, including owner maintenance, is now shared within the Operational Airworthiness Division and more specifically within the Aircraft Requirements Section.

You will need to show that the aircraft complies with each requirement stated in <u>CAR Standard 507.03</u> (<u>6) (e)</u>.

In light of a legal opinion, aircraft owners do not have to wait until those types and models of aircraft are listed Appendix H to Standard 507 before a special certificate of airworthiness - owner maintenance can be issued; owners can apply for the special certificate of airworthiness - owner maintenance. <u>BEFORE commencing any work</u> on an owner-maintenance aircraft contact a Civil Aviation Safety Inspector at the Transport Canada Centre (TCC) most convenient to you. To find the nearest TCC: <u>www.tc.gc.ca/eng/regions.htm</u>.

Some of the aircraft on the current list were originally accepted during early negotiations on the establishment of the O-M category. Transport Canada has issued the following statement to explain why some of the aircraft on the original O-M list would not qualify to be added to the list today, but can stay on the list:

"The original list of types and models of aeroplanes eligible for inclusion in the owner maintenance classification was established on an individual basis, prior to the development of specific eligibility criteria. Some of the types and models listed do not comply with all the criteria that were subsequently established. Notwithstanding this difference, the types and models in question remain eligible on the basis of their original evaluation. However, the above situation does not constitute a precedent. No further types or models will be added to the list unless they meet the eligibility criteria of <u>STD</u> <u>507.03(6) (e)</u>.

In recent years it has taken quite a long time for TC to complete the process to add a new aircraft type to the Owner Maintenance (O-M) category.

An aircraft owner would request the type be added and then it would be evaluated, be submitted to the CARAC Part V Maintenance & Manufacturing Technical Committee for approval and wind its way through the TC system until it made its way into CAR Standard 507 Appendix H at this link <u>https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433/standards/part-v-standard-507-appendix-h-aircraft-eligible-special-certificate-airworthiness-owner-maintenance and was officially on the list. This process could take a very long time.</u>

TC has tried to make the process much more streamlined and has introduced some changes that have shortened the process from up to a year down to a few weeks.

One of the challenges has been to find a place to list new types that have been accepted onto the O-M list in the time between TC acceptance and the formal amendment of the CAR Standard 507 Appendix H list.

Effective in February 2014 new aircraft added to the O-M list but not yet in Appendix H may now be found at:

http://www.tc.gc.ca/eng/civilaviation/standards/maintenance-aarpe-recreational-classification-2752.htm

Aircraft in the O-M Category

The O-M category added 22 aircraft in 2013, down from the 37 added in 2012. By the end of 2013, there were 605 O-M aircraft on the registry, made up of 591 airplanes and 14 gliders. O-M aircraft made up 4% of the aircraft added to the private fleet in 2013.

This category has continued to suffer from low numbers of aircraft being moved from the certified category ever since the American FAA announced that O-M aircraft will never be allowed to fly in U.S. airspace or sold in the USA. Overall, this category continues to stagger along with minimal interest from owners.

Owner-Maintenance aircraft, a must-read article by Brian Clarke, Civil Aviation Safety Inspector, Operational Airworthiness, Standards, Civil Aviation, Transport Canada was published in Aviation Safety Letter Issue 2 – 2013 and is reproduced in Appendix B at the end of this document.

No Experimental Aircraft Flight Permits

Owner-maintenance aircraft are ineligible to be operated under an experimental aircraft flight permit. Experimental aircraft flight permits are issued only to aircraft manufacturers, or engaged in aeronautical research and development, or special missions requiring the installation of non-certified equipment.

Amateur-built aircraft are currently excluded from eligibility for such flight permits and aircraft in the owner-maintenance classification share this exclusion.

Helicopters on the List?

There are no helicopters on the list of O-M aircraft. Only aircraft that are type-certified small powered fixed wing aircraft or gliders qualify for the O-M list.

Amateur-built and ultralight aircraft do not qualify either, as they are not certified aircraft. They are both already "owner maintenance" categories, anyway.

Checklist for Converting Aircraft to O-M Category

To put an eligible aircraft into the O-M category you need to do the following:

- <u>BEFORE commencing any work</u> on an owner-maintenance aircraft contact a Civil Aviation Safety Inspector at the Transport Canada Centre (TCC) most convenient to you. To find the nearest TCC: <u>www.tc.gc.ca/eng/regions.htm</u>.
- Check the published list of eligible aircraft models, appendix A or see this link <u>https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433/standards/part-v-standard-507-appendix-h-aircraft-eligible-special-certificate-airworthiness-owner-maintenance</u> Only these certified aircraft qualify for conversion.
- 3. To transfer an aircraft into the O-M category, pilot/owners of eligible aircraft must complete a Transport Canada Form 24-0043 available here: <u>https://www.google.com/search?q=Form+24-0043+Application+for+Certificate+of+Airworthiness&oq=Form+24-0043+Application+for+Certificate+of+Airworthiness&aqs=chrome..69i57.2462j0j4&sourceid=chrome&ie =UTF-8</u>
- 4. In completing this form you must check "Special Certificate of Airworthiness" and under the category "OTHER (SPECIFY)" and indicate "Owner Maintenance".

5. Before the application is submitted, each aircraft shall have on the side of the fuselage and in a position that is readily visible to persons entering the aircraft, the warning statement below. The placard shall be in letters at least 10mm (3/8") high and of a colour contrasting with the background and must contain both the English and French statements.

WARNING SPECIAL CERTIFICATE OF AIRWORTHINESS – OWNER – MAINTENANCE THIS AIRCRAFT DOES NOT COMPLY WITH INTERNATIONALLY RECOGNIZED AIRWORTHINESS STANDARDS

AVIS

CERTIFICAT SPECIAL DE NAVIGABILITE – MAINTENANCE PAR LE PROPRIETAIRE CET AERONEF N'EST PAS CONFORME AUX NORMES DE NAVIGABILITE INTERNATIONALES RECONNUES.

Each engine, propeller and life-limited item installed on such an aircraft shall have an "X" permanently etched, engraved or stamped at the end of the model designation and serial number on the identification plate required by <u>CAR 201.01</u>. Under <u>CAR 201.03</u> you need to apply for permission to put the "X"s on the data plates, so contact your local TC office before you do this.

A life-limited part is one that the manufacturer has designated a fixed number of hours or years between overhaul or replacement.

- 1. Submit the *Special Certificate of Airworthiness Owner-Maintenance* application form to the Transport Canada Centre serving your area.
- 2. Surrender the original *Certificate of Airworthiness* for each aircraft to the Transport Canada Centre.
- 3. Attach a cheque with each application for a *Special Certificate of Airworthiness Owner-Maintenance* for \$250, made out to the Receiver General for Canada.
- 4. The aircraft will also require a new *Certificate of Registration,* as the model number and the serial number will have changed (remember those "X"s?). To apply for the new C of R use the form that came with the existing C of R and make sure that you submit a clear, legible photograph of the aircraft data plate. TC will not process the C of R change without the photograph of the data plate. The fee will be \$65, as this is an amendment to a C of R.

If aircraft pilot/owners have current *Certificate of Airworthiness* suspension notices (for safety issues) on the Transport Canada aircraft files, these suspension notices have to be cleared before the aircraft can be transferred. You cannot evade the suspensions by changing categories.

Once the process is started to transfer the aircraft to the O-M Category the flight authority is no longer valid and until the new *Special Certificate of Airworthiness – Owner-Maintenance* is issued and the



owner is in possession of it, the aircraft cannot be flown.

Once the process is started to transfer the aircraft to the O-M Category the *Certificate of Registration* is also no longer valid (because the serial number and model number have been changed by the addition of the "X"s). Until the new *Certificate of Registration* is issued and the owner is in possession of it, the aircraft cannot be flown.

The TC Service Centers can be found at this link: <u>https://tc.canada.ca/en/aviation/civil-aviation-</u> <u>contacts-offices</u>

About Those "X"s

Each engine, propeller and life-limited item installed on an O-M aircraft shall have an 'X' permanently etched, engraved or stamped at the end of the model designation and serial number on the identification plate required by <u>CAR 201.01</u>. This means that the letter "X" is permanently etched, engraved or stamped at the end of the model designation and serial number with no space and no hyphen (i.e.: PA22-125X).

If engines, propellers and life-limited parts are replaced after the issue of the *Special Certificate of Airworthiness – Owner-Maintenance* there is a requirement for these new component dataplates to be marked with an "X", too.

The "X" is one of the conditions that must be met in order to have an aircraft in this category. The owner will have no authority to sign the maintenance release on a component that does not carry an "X." Remember, any modification to dataplates requires an authorization from the Minister pursuant to <u>CAR 201.03(3)</u> and <u>201.12(4)</u>.

If an "X"-marked engine from an O-M aircraft is removed and sent to an approved overhaul shop and this engine is overhauled as per the manufacturer recommendations and specifications, it still retains its "X" on the serial number. The owner cannot request the modification of the information on the engine identification plate to remove the "X".

As explained in <u>CAR 201.12(4)</u>, an authorization is required from the Minister to modify information on the engine data plate. The "X" cannot be removed without that authorization.

As mentioned earlier under <u>CAR 201.03</u> you need to apply for permission to put the "X"s on the dataplates, so contact your local TC office before you do this.

Important Note on Licenses

The pilot/owner of an O-M aircraft must be an aircrew license or permit holder with privileges on that aircraft type. This is very important as only the owner who is a pilot or an AME can sign the maintenance entries for an O-M aircraft.

Flying in the USA?

The FAA has some serious issues regarding the Canadian O-M category and has been refusing permission for Canadian O-M aircraft to operate in the USA or in any US airspace since July 2002.

COPA is encouraging US aircraft owners wishing to request a similar category be created by FAA in the US, this may open the discussion on accepting Canadian O-M aircraft. COPA is keeping watch on this issue, but we don't have a solution at this time and it looks like it will not be resolved in the near future.

The bottom line is: if you need to be able to fly your airplane outside of Canada do not put it in the O-M category!

Importing an Aircraft into O-M

Several COPA members have asked if it is possible to import an aircraft from another country, usually the USA, and register in Canada directly into the O-M category without it having to go through the whole "certified aircraft importation inspection process". The answer is "yes"; TC HQ has confirmed that this is specifically allowed.

In this case the aircraft would be directly registered in the O-M category following an import inspection. Technically the owner can be delegated by TC to do the import inspection, but in practice this doesn't happen. The inspection is almost always done by a TC Maintenance and Manufacturing inspector. Under <u>CAR 103.02</u> TC always reserves the right to inspect any aircraft and they can do so at importation, if they wish to do so. This inspection will verify that the aircraft meets the eligibility criteria for the owner maintenance classification and is safe for flight. At the very minimum, an annual inspection will ensure that the aircraft is indeed safe for flight. Please note that the aircraft does not have to meet the requirements of the type certificate for the issuance of a special certificate of airworthiness - owner maintenance. All cases where an aircraft is Imported to be placed in the Owner Maintenance category, the aircraft are inspected by a TC Inspector.

What Can I Do In This Category?

The O-M category gives pilot/owners the authority to:

- maintain an airplane
- conduct and sign for the annual inspection
- refurbish all or part of an airplane
- overhaul all or part of an airplane
- install certified and uncertified parts
- install or replace any instruments or avionics

- modify an airplane within certain limits
- rebuild an airplane that is out of service
- sign the maintenance release.

If in doubt, contact the nearest TC Service Centre

Pilot/owners must keep in mind that replacement parts may not be available and manufacturer's product support may be non-existent. This may mean that parts will have to be made for the aircraft.

Rebuilding and Modifying Aircraft in the O-M Category

Under the Owner-Maintenance category, aircraft pilot/owners are allowed to perform and certify regular and specialized maintenance. This means that aircraft pilot/owners are allowed to rebuild damaged aircraft, run-out components and engines and modify existing aircraft within certain limits.

The airplane being rebuilt or modified must be one that is type-approved in the certified category. The aircraft type will have to be eligible for a *Special Certificate of Airworthiness – Owner-Maintenance*. If an aircraft to be rebuilt or modified appears on the eligible list, contact the nearest <u>Transport Canada</u> <u>Centres</u> and notify them of your intentions. Once you are given the go ahead and before a *Special Certificate of Airworthiness – Owner-Maintenance* is issued, the government reserves the right to inspect the aircraft.

Transport Canada's current policy is that there will be no systematic inspections of aircraft involved in applications for a *Special Certificate of Airworthiness – Owner-Maintenance*. However, CAR 103.02 gives the Minister the authority to inspect any aircraft if he so wishes. For example, an aircraft with a valid Certificate of Airworthiness being converted to the O-M category may not need to be inspected. An aircraft that has been out of valid flight authority for some period may need to be inspected. The decision to inspect or not to inspect rests with the Transport Canada Maintenance and Manufacturing inspector acting on behalf of the Minister.

Owners of O-M aircraft are required to comply with <u>CAR 571.12</u> and report major repairs and modifications to the aircraft to Transport Canada. Where the change involves the engine, the owner has to report to TC and have the flight authority re-issued. The information on the Special C of A specifies the engine and must correspond with the aircraft.

Limits on Modifying O-M Aircraft

Changes to CAR STD 507.03 introduced in January 2003 limit the extent to which you can modify an aircraft in the O-M category. Under these rules the aircraft cannot be modified so that it no longer would qualify to enter the O-M category.

This means that you **cannot**:

- Modify an aircraft to increase the number of seats to more than four.
- Change the engine so that it is powered by an engine that is not a single, normally aspirated, piston engine. This means no turbochargers and no turboprops, turbofans or turbojets, rockets, etc.
- Unless the aircraft is a glider, a powered glider, an aircraft with a wooden airframe or one of those aircraft that was accepted on the original list with either retractable landing gear or a variable pitch propeller then it cannot be modified to have retractable landing gear or a variable pitch propeller. Ground-adjustable pitch propellers are acceptable and must meet the requirement of with respect to the "fixed pitch" propellers. In a ruling in April 2005 TC indicated that this also covers amphibious floats as they would modify an aircraft to have retractable landing gear and are therefore not permitted.
- You cannot increase the gross weight of the aircraft the maximum take-off mass cannot be greater than that shown on the original aircraft file.
- The operating conditions that are part of O-M aircraft shall not authorize aircraft flight operation privileges other than those presently permitted by the aircraft flight manual, pilot operating handbook, aircraft operating manual or other equivalent document. This means, for instance, that you cannot approve aerobatic maneuvers for an aircraft that was not previously approved for them.

Installing Parts

Installing parts on your plane is a subject that confuses a lot of people. What parts are you allowed to install and what paperwork is required for which parts?

O-M aircraft are authorized in <u>CAR 571.07</u> to have non-certified parts installed. It is recommended that aviation quality parts be installed, but it is not required. The decision is left to the owner as to the suitability of parts. No certification document is required for new parts installed on these aircraft. A used part that has undergone maintenance will need a document releasing that work. The release can, of course, be signed by the pilot/owner of the aircraft.

Reversing the Classification of an O-M Aircraft

Returning re-classified aircraft to a certified category will be expensive, time consuming and difficult. This was done on purpose as the O-M category was not intended to be one where aircraft would move into it and then back out again.

To move an aircraft from the O-M category back to the certified category the aircraft engine, propeller and primary flight instruments will have to be overhauled by an approved maintenance organization. The whole aircraft, aircraft systems and equipment will have to be inspected for conformity to type design and an appropriately rated AME must sign a maintenance release.

Pilot/owners who anticipate selling their aircraft internationally or for commercial use should not reclassify their aircraft into the Owner-Maintenance Category.

Insurance for O-M Aircraft

Like any other aircraft, owner-maintenance aircraft require the same minimum Third-Party Liability insurance as other aircraft flying in Canada, which is:

- \$100,000 public liability for aircraft 2,300 lb and below
- \$500,000 for aircraft between 2,301 and 5,000 lb.

This CAR does not require insurance for passengers, crew or the aircraft hull, just for damage to "third party" property.

COPA's VIP Aviation Insurance Program, administered through The Magnes Group Inc., will cover owner-maintenance aircraft on the same basis and for the same rates as certified aircraft are covered.

COPA's VIP Aviation Insurance Program include third-party property damage and bodily injury, passenger legal liability, not-in-motion and in-motion hull insurance and work-in-progress insurance. More information on COPA VIP Aviation Insurance on COPA's website.

If you are considering moving your certified aircraft to the O-M category and are <u>not</u> insured through COPA's aviation insurance program you should discuss the implications with your insurance broker to ensure that you will still qualify for coverage through their program.

Licensed Pilots Only

There is one important difference between amateur-built aircraft and the Owner-maintenance Category. With amateur-built aircraft, the aircraft owner may certify the maintenance. In the owner-maintenance category, the owner must also be a licensed pilot in order to certify the maintenance, as described in <u>CAR 571.11</u>. This might not be a problem for most people interested in the O-M category, but there may be some pilots who want to register an aircraft in the name of a non-pilot spouse.

Transport Canada has confirmed that holders of a *Pilot Permit - Recreational Aeroplane* and *Pilot Permit – Ultralight Aeroplane* are also qualified to own and sign for aircraft in the O-M category even though they are permit holders rather than license holders. The following limitations apply:

- *Pilot Permit Ultralight Aeroplane* holders may sign for O-M aircraft that fit the limits of that permit:
 - Any single-engined aeroplane having not more than two seats, a maximum take-off weight not exceeding 544 kg (1,200 pounds) and a stall speed in the landing configuration (V_{so}) of not more than 39 knots
- *Pilot Permit Recreational Aeroplane* holders may sign for O-M aircraft that fit the limits of that permit:

- the aeroplane is a single-engined aeroplane that is not a high-performance aeroplane and the aeroplane is designed, or is authorized by a type certificate, to carry a maximum of four persons.
- *Student Pilot Permits* A student pilot cannot sign a maintenance release even if they are the owner of the aircraft. The privileges of a *Student Pilot Permit* are restricted to training activities.



Who Can Work On O-M Aircraft?

Anyone can work on an O-M aircraft but only people with either of the following two qualifications can sign the maintenance release for the work done:

- 1. The owner, who is also a pilot, can sign for the work done with a maintenance release as described in <u>CAR 571.11</u>.
- 2. Aircraft maintenance engineers (AMEs) are the only people, other than pilot/owners, who are allowed to sign out work on an O-M aircraft.

Pilot/owners with a pilot license can still use the services of an AME, but may certify the work themselves. In practice this means that some AMEs, who are reluctant to work on an aircraft and then sign for non-certified repairs, are more comfortable doing the work and allowing the pilot/owner to sign the maintenance release.

What happens if a pilot's Medical Certificate has been suspended or is expired? A pilot's medical validates the privileges of the license for flying. Without a valid medical, pilot/owners may continue to sign off maintenance on their O-M aircraft.

You should note that a *Minister's Delegate* – *Recreational Aircraft* cannot conduct O-M inspections. The MD-RA's function is to inspect an amateur-built aircraft in order to ascertain that it is designed and constructed in conformity with CAR STD 549. Any inspection of an owner-maintained aircraft by an MD-RA is outside the scope of their current delegation and would not be covered under their duties or indemnification as a minister's delegate

What Does the Maintenance Release Have to Say?

The owner, who is a pilot, may sign any maintenance release for an O-M aircraft, or an AME may sign. The wording should be as described in <u>CAR 571.10</u>:

"The described maintenance has been performed in accordance with the applicable airworthiness requirements." or a similarly worded statement.

Annual Inspection

O-M aircraft still need an annual inspection, like all other aircraft (except ultralights and hang gliders), need an inspection every year. Here is what CAR 625.86 (2)(a) says: "as applicable to the type of aircraft, at intervals not to expire later than the last day of the 12th month, following the preceding inspection"

The annual inspection specified in CAR 625.86 can be carried out by the owner of the aircraft (who is a pilot) and the maintenance release for the annual inspection signed by him/her.

What About the "Out of Phase" Maintenance Items?

Car 625 Appendix C lists the "out of phase items" that don't form part of the aircraft's annual inspection. O-M aircraft are required to comply with the requirements of this appendix, except where they are specifically exempted.

Most of the items are fairly straightforward and within the capabilities of most pilot/owners, but some items require specialized equipment. Pilot/owners may want to contract out that work to specialty shops.

A review of CAR 625 Appendix "C" is a good idea to plan your maintenance requirements and ensure that you don't miss anything.

Here are some of the key items that may require outside assistance to complete the requirements:

- 1. Variable Pitch Propellers O-M aircraft are now exempted from this requirement to have these overhauled every ten years. The owner can now decide when these need overhauling.
- 2. **Tachometers** to be calibrated annually this will require a "tach check" or other calibration device.
- 3. **Compass Calibration** every 12 months requires a compass rose or ground compass system and a brass screwdriver to complete.
- 4. **ELT** must be bench-tested annually in accordance with CAR STD 571 Appendix G. This involves a bench-test of power output and frequency stability and generally cannot be completed by the pilot/owner.

- 5. Altimeters used for IFR flight or VFR in Class "B" airspace calibrated every 24 months. This involves a bench test and also generally cannot be completed by the pilot/owner unless you have access to specialized calibration equipment.
- 6. **Transponders and Mode "C" encoders (when installed)** calibrated every 24 months in accordance with CAR STD 571 Appendix F. This involves a bench test and also generally cannot be completed by the pilot/owner unless you have access to specialized equipment.

IFR, Night, VFR-OTT

Aircraft under the Owner-Maintenance Category are normally issued a *Special Certificate of Airworthiness – Owner-Maintenance* that restricts them to Day VFR flight only.

O-M aircraft may qualify for night, IFR and VFR-Over-The-Top under certain circumstances. Each individual O-M aircraft will need an approval that will include showing that the aircraft is properly equipped and that it has had a correlation check completed that shows that all parts of the avionics and instrument suite are working correctly together. CAR 605 identified the requirements for the necessary instrumentation.

Additional equipment can be installed and signed off by the pilot/owner. Outside specialized work, such as altimeter and Mode C calibration will be necessary, unless you have access to the specialized equipment required.

Switching to Floats

O-M aircraft pilot/owners may sign off a seasonal conversion of the landing gear.

Non-Certified Floats for O-M Aircraft

Several new float manufacturers are producing non-certified floats for the homebuilt market. Some of these are suitable for O-M aircraft. These new types of floats can be cheaper, lighter, stronger, more streamlined and easier to repair than the traditional certified floats. Some new aluminum float designs are also available as kits.

There are no restrictions on installing these non-certified floats on O-M aircraft other than those that involve amphibious floats. Unless the aircraft is an aircraft with a wooden airframe or one of those aircraft that was accepted on the original list with retractable landing gear then it cannot be modified to have retractable landing gear. This means that amphibious floats cannot be installed on these aircraft as this would modify an aircraft to have retractable landing gear.

Handheld Fire Extinguishers

Most pilots know that all powered aircraft except ultralights need fire extinguishers. That requirement is outlined in CAR 602.60 but that CAR is pretty general in nature. It just requires "a hand-held fire

extinguisher in the cockpit that is

- of a type suitable for extinguishing the fires that are likely to occur,
- designed to minimize the hazard of toxic gas concentrations, and
- readily available in flight to each flight crew member"

That CAR doesn't tell you what standard the fire extinguisher has to meet, if any and doesn't refer to anywhere else in the CARS to look for a standard for fire extinguishers.

As is common in the CARS there is a standard, but it is well hidden and not cross-referenced from the regulation.

The standard for fire extinguishers is hidden away in CAR 551.400. This CAR indicates that it is the standard for "Hand-Held Fire Extinguishers required by CAR 602.60, 604.41, 704.83 and 705.93." and includes this information note:

"As required by CAR Part VI and VII requirements, hand-held fire extinguishers shall contain a type and quantity of extinguishing agent suitable for the kinds of fires likely to occur in the compartment where the extinguisher is intended to be used. For crew and passenger compartments, hand-held fire extinguishers shall be designed to minimize the hazard of toxic gas concentrations."

It then lists the acceptable standards that hand-held fire extinguishers must comply with. These are any of:

- TSO C19b.
- approved by Underwriters Laboratories of Canada, bearing ULC approval label; approved by the British Civil Aviation Authority (BCAA) for aircraft use;
- approved by the Federal Aviation Administration (FAA) for aircraft use,
- approved by Underwriters Laboratories Inc. (U.L.), Factory Mutual Research Corporation to specification U.L. 1093 (construction and operation), and to specification U.L. 711 (rating and testing);
- approved by U.S. Coastguard under title 46 of the U.S. Code of Federal Regulations, for use in aircraft;
- approved for aircraft use by the airworthiness authority of any country, whose standards are accepted by the Minister.

The CAR then gives information on the installation: "The installation of hand-held fire extinguishers shall be such that when properly secured in its mounting:

(1) the extinguisher will remain secure when subjected to the ultimate inertia loads established by the aircraft basis of certification, but not less than the following ultimate load factors:

Load Factors	Aeroplanes	Rotorcraft
forward	9.0	4.0



sideward	1.5	2.0
upward	2.0	1.5
downward	4.5	4.0

(2) the extinguisher will have a "quick release" function to enable easy removal from its mount.

The standard then finished with requirements for Identification and Markings:

(1) The hand-held fire extinguisher shall be identified and marked with the applicable specifications as determined by the approving authority per paragraph (b).

(2) A stowage compartment or stowage container that contains a hand-held fire extinguisher shall be clearly marked as to its contents."

So as long as your installed handheld fire extinguisher meets one of those stated standards and is mounted as described then it will meet the CAR requirements.

Duration of Flight Authority

Once the *Special Certificate of Airworthiness - Owner-Maintenance* is issued, the airplane may be flown under the same regulations and standards as when it was a certified aircraft. The same maintenance regulations and standards also apply, except maintenance and inspections on the aircraft may be signed either by the pilot/owner or an AME.

Unlike the pervious *Flight Permit – Specific Purpose – Owner-Maintenance* that were used in this category, which were only valid for a year, the current *Special Certificate of Airworthiness – Owner-Maintenance* is valid indefinitely, just like a standard *Certificate of Airworthiness* for certified aircraft.

Owner-Maintenance Aircraft Category – Counterpoint

The following are issues that an aircraft pilot/owner should consider before switching their airplane to the Owner-Maintenance Aircraft Category.

Safety

"The most dangerous thing in aviation is a pilot with a screwdriver."

The above quote comes from more than one aircraft maintenance engineer. Most aircraft pilot/owners are trained to fly, not to fix. The prospect of them doing their own airplane maintenance is scary.

It takes three years to educate an apprentice on the basics of aircraft inspection and repair. Amateurbuilt airplane owners have the benefit of the construction process, which is often much longer than



three years, to learn how to work on their airplanes.

Owners of certified aircraft who are not trained in maintenance should continue to use the services of an AME to assist them as they learn the aircraft. The O-M category allows this.

One-Way Street

The owner-maintenance category is designed to be non-reversible. Once an aircraft is converted to the category, it is prohibitively expensive to change it back to being a certified aircraft. The aircraft engine, propeller and primary flight instruments have to be overhauled by an approved maintenance organization. The aircraft systems and equipment must be inspected for conformity to type design, and a maintenance release has to be signed by an appropriately rated AME. Do not move an airplane into this category with the expectation of returning it to the certified category later on.

Aircraft Value

Now that Canadians have some years of experience with the O-M category it is apparent that O-M aircraft are not losing their value in comparison to their certified equivalents. But, that said, aircraft that have prices driven up by demand in the US market may well see lower values in the non-exportable O-M category in the future.

Only in Canada

Canada is the first country to launch an Owner-Maintenance category and these aircraft no longer meet ICAO airworthiness standards. This means that O-M aircraft may not be flown in another country without prior written permission.

The O-M Aircraft Category is not recognized outside Canada. An O-M airplane does not qualify for an *Export Airworthiness Certificate*.

To fly outside Canada, validation of the *Special Certificate of Airworthiness – Owner Maintenance* will be required by the foreign Civil Aviation Authority.

Currently the FAA is <u>not</u> giving permission for Canadian O-M aircraft to operate in the USA or in US airspace.

If you need to be able to fly your airplane outside of Canada do not put it in the O-M category!

Flight Training Resistance

As with amateur-built aircraft, it would not be unreasonable for a flight training organization to refuse to conduct training in an O-M aircraft.

Pilot/owners planning flight training for themselves or their family in their own O-M aircraft should check with their local flying school or free-lance instructor before switching their aircraft into the non-certified O-M category to see if instructors are available and willing to fly in the aircraft.

Personal Use Only

O-M aircraft cannot be used for a commercial air service. They are limited to recreational and private business flying only.

For More Information

Canadian Owners and Pilots Association

COPA maintains a large website of information on general aviation at <u>www.copanational.org</u>.

Transport Canada

Maintenance & Manufacturing inspectors at the Transport Canada Centers are the O-M information contacts. They are listed on the TC Web site: <u>Transport Canada Centres</u>.

The <u>TC Aeronautical Information Manual (AIM) GEN section</u> also contains the telephone numbers of the TC Maintenance & Manufacturing representative in each region.

The Canadian Aviation Regulations, including maintenance regulations, appear on the Justice Web site: <u>http://laws-lois.justice.gc.ca/eng/regulations/SOR-96-433/index.html</u>

Appendix A – Aircraft Currently Eligible for the Owner-Maintenance Category

А

AERO COMMANDER 100, 100 180 **AERONCA C3** AERONCA K, KC AERONCA S11AC, S11BC, S11CC AERONCA 11AC, 11BC, 11CC AERONCA 15AC, S15AC **AERONCA S65CA** AERONCA S7CCM, S7DC, S7EC AERONCA 058B **AERONCA 50C** AERONCA 65C, 65CA, 65LA, 65LB AERONCA 65TAC, 65TC AERONCA 7AC, 7BCM, 7CCM, 7DC, 7EC AEROTECHNIK L 13 SEH VIVAT ALON A2, A2A AMERICAN AVN AA 1, AA 1A, AA 1B, AA 1C AMERICAN AVN AA 5, AA 5A, AA 5B AMERICAN GENERAL AG 5B AVIONAUTICA M100S AVRO AVIAN MKIVM

В

BEAGLE AUSTER A61 BEECH 19A BEECH 23, A23, A23 19, A23 24, A23A, B23 BELLANCA 14 13, 14 13 2, 14 13 3, 14 19 BELLANCA 7ACA, 7ECA, 7GCAA, 7GCBC, 7KCAB BOEING MODEL 75, A75, B75N1, E75, E75N1, PT-17 BURKHART GROB G102 ASTIR CS, CS 77 BURKHART GROB G102 CLUB ASTIR III, IIIB BURKHART GROB G102 STND ASTIR III BURKHART GROB G103 TWIN ASTIR BURKHART GROB G103 TWIN ASTIR BURKHART GROB G103 TWIN II BURKHART GROB G103 TWIN II

С

CALLAIR A3, S1B1 CENTRAIR ASW20F CESSNA 120, 140, 140A, 150*, 150A,150B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, A150K,



170, 170A, 170B, 172*, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 175, 175A, 177*, 305A, 305C

(* <u>Note</u>: These aircraft include only the specific 1959-60 model "150", 1956-59 model "172" and the 1968 model "177" and not any other models)

CHAMPION 402 CHAMPION 7AC, 7BCM, 7EC, 7ECA, 7FC, 7GC, 7GCA, 7GCAA, 7GCB, 7GCBC, 7KC, S7EC COLONIAL C1, C2 CORCORAN B, TG1A CUB AIRCRAFT J3C65 J3C50 D DART G **DE CHATILLON AIR100** DEHAVILLAND DHC 1, DHC 1A 1, DHC 1B 1, DHC 1B 2, DHC 1B 2S3, DHC 1B 2S5 **DEHAVILLAND DH60GM** DEHAVILLAND DH82A, DH82C **DEHAVILLAND DH83C** DIAMANT 16.5 Е EIRI EINO RIIHELA PIK 20E **EIRIAVION OY PIK 20B** ERCO E, G ERCO 415C, 415 CD, 415 D F FAIRCHILD M62A-3 (CORNELL) FAUVEL AV36 FLEET 80 FORNEY F 1, F 1A FUNK B85C G **GARDAN GY 80 160** GENERAL AIRCRAFT G1 80 GLASER DIRKS DG 100, DG 200, DG 200/17 DG 300, DG 400, DG 600 **GLASFLUGEL HORNET 206** GLASFLUGEL LIBELLE H301, H301B GLASFLUGEL MOSQUITO, MOSQUITO B GLASFLUGEL STND LIBELLE 201, 201B GLOBE GC 1A



GROB G 109, G 109B GRUMMAN AA 5B GULFSTREAM AA 5A, AA 5B

I

ICA BRASOV IS 28B2, IS 29D2

L

LAISTER LP 49 LAISTER KAUFFMANNLK10A LET L 13 BLANIK LET L 23 SUPER BLANIK LET L 33 SOLO LUSCOMBE 8A, 8C, 8D, 8E, 8F, T8F

Μ

MAULE M 4, M 4 T MILES HAWK MAJ M2W MOLINO OY PIK 20 MONOCOUPE 90AF MOONEY M18C, M20, M20A, M20B MORANE SAULNIER MS880B, MS893E MORRISEY SHINN 2150-A MUDRY CAP 10B

Ρ

PETERSON J4 PEZETEL KR 03A PEZETEL SZD 36A, SZD 41A, SZD 48 1, SZD 50 3, SZD 55 1, SZD 59 PILATUS B4PC11, B4PC11AF PIPER J2 PIPER J3, J3C, J3C50, J3C65, J3C65S, J3F50, J3F60, J3F65, J3L65 PIPER J4A, J4E PIPER J5A, J5C PIPER L4B PIPER PA11, PA11S PIPER PA12, PA12S PIPER PA14 PIPER PA15 PIPER PA16, PA16S PIPER PA17 PIPER PA18, PA18 105, PA18 125, PA18 135, PA18 150, PA18A, PA18A 150, PA18AS 150, PA18S, PA18S 105, PA18S 135, PA18S 150 PIPER PA20, PA20 115, PA20 135, PA20 150, PA20S, PA20S 135

PIPER PA22, PA22 108, PA22 135, PA22 150, PA22 160, PA22S 150, PA22S 160 PIPER PA-28-140, PA-28-180, PA-28-160 CHEROKEE PITTS S1S, S1T, S2A PORTERFIELD CP65 R **REARWIN 185 REPUBLIC RC-3** ROLLADEN SCHNEIDER LS 1C, LS 4, LS 6B S SCHEIBE BERGFALKE II, II/55 SCHEIBE BERGFALKE III SCHEIBE L SPATZ III, L SPATZ 55 SCHEIBE SF 26A, 27A SCHEIBE ZUGVOGEL IIIB SCHEMPP-HIRTH CIRRUS SCHEMPP-HIRTH MINI NIMBUS B, C, HS7 SCHEMPP-HIRTH S, SHK 1, SH1 SCHEMPP-HIRTH STANDARD CIRRUS SCHLEICHER ASK 13 SCHLEICHER ASW 12 SCHLEICHER ASW 15, ASW 15B SCHLEICHER ASW 17 SCHLEICHER ASW 19, ASW 19B SCHLEICHER ASW 20, ASW 20B SCHLEICHER ASW 24 SCHLEICHER K7 SCHLEICHER KA 6 CR, KA 6E SCHLEICHER K8B SCHLEICHER RHONLERCHE II SCHNEIDER WERKE GRUNAU GLIDER II SCHWEIZER SGS 1 23 SCHWEIZER SGS 1 26, SGS 1 26A, SGS 1 26B, SGS 1 26C, SGS 1 26D, SGS 1 26E SCHWEIZER SGS 1 34 SCHWEIZER SGS 1 35 SCHWEIZER SGS 1 36 SCHWEIZER SGS 2 32 SCHWEIZER SGS 2 33, SGS 2 33A SCHWEIZER SGU 1 19 SCHWEIZER SGU 1 20 SCHWEIZER SGU 2 22, SGU 2 22C, SGU 2 22CK, SGU 2 22E, SGU 2 22EK SCHWEIZER TG 3A SCHWEIZER TSC 1A2, 43 3B

COP

START & FLUGH101 STINSON HW 75, 10, 10A, 108, 108-1, 108-2, 108-3

Т

TAYLORCRAFT A TAYLORCRAFT BCS12D TAYLORCRAFT BC12 65, BC12D, BC12D 4 85, BC12D 85, BC12D1 TAYLORCRAFT BC65 TAYLORCRAFT BF12 65 TAYLORCRAFT BL12 65, BL65 TAYLORCRAFT DCO65 TAYLORCRAFT F19, 19 TAYLORCRAFT F21 THURSTON TSC 1A THURSTON TSC 1A1

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VARGA2150A VOLAIRE 10

W

WAGGON/MASCH PHOEBUS B1, PHOEBUS C WOLF HIRTH DOPPEL RAAB IV COPA

Appendix B - Owner-Maintenance by Brian Clark, Civil Aviation Safety Inspector

Owner-Maintenance

Brian Clarke, Civil Aviation Safety Inspector, Operational Airworthiness, Standards, Civil Aviation, Transport Canada

Aircraft owners can apply to have their aircraft's 'normal' certificate of airworthiness replaced by a Special Certificate of Airworthiness - Owner-maintenance. When an aircraft is in the ownermaintenance classification the aircraft owner— if they are a pilot—can perform and release maintenance on their own aircraft. The first Special Certificate of Airworthiness – Owner-maintenance was issued in 2002 and there are now about 550 owner-maintenance aircraft registered, out of a Canadian non-commercial fleet of over 20 000 aircraft. The program is clearly not wildly popular, perhaps because owner-maintenance aircraft are not allowed by the Federal Aviation Administration (FAA) to fly in the United States. Nevertheless, questions to Transport Canada Civil Aviation (TCCA) related to owner-maintenance are frequent. The purpose of this article is to review some of the significant specifics on the subject of the owner-maintenance classification. Under Canadian Aviation Regulations (CAR) Standard 507.03(6), the Special Certificate of Airworthiness - Owner-maintenance was established to allow the non-commercial use and enjoyment of relatively simple, generally older aircraft for which certified parts were scarce and support from the manufacturer limited. After the classification had been in place for a few years, owners of owner-maintenance aircraft were granted a Ministerial Exemption to CAR 605.03(1)(a), (b) and (c)—the requirement to have and carry a Certificate of Airworthiness. The exemption has the effect of allowing flight of an owner-maintenance aircraft that is no longer in conformity with its type certificate, and thus allows some degree of modification of the aircraft and the installation of equipment that was not specified by the manufacturer. The letter of exemption is carried aboard the aircraft and effectively becomes the aircraft's airworthiness certificate. We refer to aircraft with a Special Certificate of Airworthiness - Owner-maintenance and those flying under the Exemption as "owner-maintenance classification" aircraft. 20 Maintenance and Certification ASL 2/2013 Owner-maintenance aircraft, just like other aircraft, have to be continuously maintained in accordance with a maintenance schedule conforming to CAR 605.86. Some maintenance tasks required by the schedule may require skills or equipment that the owner/pilot does not have; when the owner/pilot is not qualified or equipped to perform a required task, he or she can and should contract the work to a qualified person or organisation. In these instances, an Aircraft Maintenance Engineer (AME) or Approved Maintenance Organisation (AMO) can and should perform and release work on owner-maintenance classification aircraft. Maintenance on owner-maintenance

aircraft has to be performed in accordance with CAR 571.02, which calls for proper practices and use of the correct tools, manuals and instruments; records have to be kept in accordance with CAR 507.03 and 605.92. All modifications and repairs to owner-maintenance aircraft must be performed in accordance with at least "acceptable data", as defined in CAR Standard 571.06. This may seem a lower bar than the "approved data" or "specified data" required for major modifications to aircraft maintained to a "non-Special" Certificate of Airworthiness, but it does not allow the unfettered installation of inappropriate parts or radical modifications. CAR Standard 507.03(6)(e) lists the eligibility conditions for the owner-maintenance classification. An owner-maintenance aircraft cannot be modified beyond those limits. For instance, a constant speed propeller or amphibious floats cannot be installed on an owner-maintenance or "Exemption" aircraft, because the aforementioned standard limits eligibility to, among other things, aircraft with fixed pitch props and fixed landing gear. Significant modifications that affect the structural strength, performance, power plant operation, or flight characteristics of the aircraft have to be reported to TCCA before flight. A Civil Aviation Safety Inspector (CASI) who is asked to consider the issue of the letter of exemption, or indeed any flight authority, has to verify that the aircraft is safe for flight. The determination that the aircraft is safe for flight is made by examining records and documents provided by the owner, but the CARs (and normal prudence) do not require that a CASI accept the owner's declarations without review or confirmation. As a delegate of the Minister of Transport, the CASI has the authority to personally inspect or cause to be inspected any aircraft for which an application for flight authority has been made. Any personal inspection by a CASI of an owner-maintenance aircraft will be to the extent necessary to verify that the aircraft is as described in the documentation and is free of obvious defects. In the simplest case of an aircraft having a valid Canadian Certificate of Airworthiness transitioning to owner-maintenance, a CASI's inspection is very rarely required. A CASI's inspection will normally be conducted subsequent to unsatisfactory document review or if the aircraft is being imported, has not been operated in the last five years, or does not conform to its type design. Aircraft can be imported directly into the ownermaintenance classification and an aircraft intended for owner-maintenance that does not meet its type design on import may be issued with the Ministerial Exemption mentioned above. Well-meaning people have come to the mistaken conclusion that the classification and exemption together allow the straightforward import and registration of disassembled aircraft, damaged aircraft and aircraft with incomplete technical records as well as heavily modified aircraft. This is not the case. Consistent with the import requirements for other aircraft, it is reasonable for the Minister to require that an inspection up to equivalent-to-annual of the imported aircraft be carried out and if necessary that it be carried out by an AME. The CASI may require that a defect list be compiled and cleared, followed by inspecting the aircraft him or herself. Lastly, it is important to note that while reversal of the ownermaintenance registration is possible it will not be easy or cheap. Any questions you may have can be directed to a CASI at the Transport Canada Centre (TCC) most convenient to you. Web links: Lists of aircraft that have been determined to be eligible for owner-maintenance classification:

www.tc.gc.ca/eng/civilaviation/regserv/cars/part5-standardsa507sh-1837.htm

and

www.tc.gc.ca/eng/civilaviation/standards/maintenance-aarperecreational-classification-2752.htm