

## VERSION 1.6

### TRANSPORT CANADA AVIATION

### Ultra-Light Aeroplane Policy

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Original Approved By  
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## EXECUTIVE SUMMARY

### 1.0

#### Background

The last few years have seen remarkable developments in the Canadian ultra-light (UL) aeroplane community. About a dozen companies in Canada manufacture ultra-light aeroplanes and the UL segment is one of the fastest growing in the Canadian aviation community. The most significant progress has been in the design, construction and performance of the newer generation of UL aeroplanes.

The legislation promulgated in the early 1980's was appropriate for UL aeroplanes at that time, however, many of these aeroplanes now feature enclosed cockpits and skinned fuselages, engines in the 90 horsepower range, electrical and dual ignition systems and disc brakes. Some have high-lift devices. These advancements to the ultra-light aeroplane combined with the decline in affordable General Aviation aircraft (e.g., Cessna, Piper, Bocch), created a market for simpler, lower cost aeroplanes and regulatory requirements that could, once again, put recreational aviation within reach of the average Canadian. The UL aeroplane manufacturing industry responded by producing technically advanced UL aeroplanes capable of rivalling the price, performance and availability of entry level general aviation aircraft.

As these increasingly sophisticated aeroplanes evolved, they began to exceed the previously established weight limitations for UL aeroplanes. Co-incidentally, the UL community began calling for increased privileges such as passenger carriage and freer access to controlled airspace. These higher UL aeroplane weights and additional operator privileges are beyond the scope of current legislation, thus, Canadian manufacturers and owners of these new generation ultra-light aeroplanes feel penalized by, and increasingly resentful of, the existing regulations.

Recognizing the need for a progressive approach, the Director General, Aviation Regulation (DGAR), struck a committee of Transport Canada (TC) specialists (referred to in this paper as "the Committee"). The members of this committee hold technical expertise which permit TC to review, in detail, the various issues involved. Not the least of these issues is the fact that TC has no additional resources with which to regulate this new area.

The Committee documented its deliberations, conclusions and recommendations for improved UL policy and legislation in a previous paper, and circulated it within the Canadian aviation community for comment. In the subsequent development of this policy, the Committee sought, received and was guided by the generous input of the Canadian aviation community, including the UL community.

Transport Canada (TC) supports the development of ultra-light (UL) aeroplanes in Canada and is committed to fostering the safety of ultra-light aeroplanes as well as increasing the standards for UL aeroplane pilots. TC also supports the concept of a largely self-regulated recreational UL aeroplane community.

*Note: While specific policy statements are found in part 2.0 of this paper, the salient points of TC's UL aeroplane policy are summarized below.*

*Note: To differentiate ultra-light aeroplanes that meet the design standards from those that do not, the term "advanced ultra-light aeroplane" (AULA) will be used.*

## 2.1 UL Aeroplane Standards

- TC encourages the UL Aeroplane Community's use of improved standards for the design, construction, maintenance and inspection of ultra-light aeroplanes. The Minister has already accepted, and encourages the adoption of, the UL aeroplane community's *Design Standards for Advanced Ultra-Light Aeroplanes*. To enhance the serviceability of UL aeroplanes after January 1, 1993, two seat UL aeroplanes admitted to the Canadian Civil Aircraft Register must either
  - (a) be a factory or kit-built aeroplane that meets design standards published in TP 10141, *Design Standards for Advanced Ultra-Light Aeroplanes*; or
  - (b) qualify as an *Amateur-Built Ultra-Light Aeroplane* (being an owner-built aeroplane meeting the stalling speed and maximum weight specified in TP 10141, *Design Standards for Advanced Ultra-Light Aeroplanes*).
- Single seat ultra-light aeroplanes having a launch weight of not more than 165 kg will not have to meet the *Design Standards for Advanced Ultra-Light Aeroplanes* after January 1, 1993 deadline.
- UL aeroplanes that were registered before January 1, 1993, and that cannot meet the new standards, will be able to continue operating in accordance with regulations in effect before January 1, 1993.

- TC will consider an amnesty program that will allow overweight UL aeroplanes that do not meet the design standards or do not qualify as *Amateur Built Ultra-Light Aeroplanes* to continue operation, with the *Manufacturer's* concurrence, at up to 1.2 times their originally specified launch weight. TC recommends that the owners of these aircraft seek the advice of the *Manufacturer* to assess the condition of the UL aeroplane and to establish a maintenance and inspection program that will ensure the continued serviceability of the UL aeroplane under these conditions.

## 2.2 UL Aeroplane Pilot Standards

- TC encourages the upgrading of UL Pilot standards and skills. While the Private Pilot Licence - Aeroplanes (PPL-A) is the current acceptable standard for operation of *AULA's* in controlled airspace or with passengers onboard, TC will consider proposals from established organizations for training programs leading to certain additional privileges being endorsed on existing UL pilot licences and increasing the credit of UL flying experience towards higher licences. The additional privileges include:
  - (a) passenger carriage;
  - (b) access to controlled airspace;
  - (c) land and sea ratings (required by the operator of an *Advanced Ultra-Light Aeroplane* who wishes to carry a passenger); and
  - (d) authority for CPL-UL holders to train candidates for the above privileges.

## 2.3 UL Aeroplane Operating Standards

- TC supports the concept that a passenger may be carried onboard a land or sea *Advanced Ultra-Light Aeroplane*, provided applicable regulations are complied with and the pilot is suitably rated.
- *Advanced Ultra-Light Aeroplanes* may be flown in controlled airspace provided they meet the required Equipment Orders and are flown by a suitably rated pilot.

### 3.0

#### Implementation

This policy received approval-in-principle from the Director General, Aviation Regulation on January 11, 1991. To provide industry with a final opportunity for clarification and resolution of minor points, TC held a consultation meeting in Toronto, on February 19, 1991. Based on input gained from this meeting, and two subsequent meetings on March 2, 1991, and April 29, 1991, TC finalized the policy and began the rule making process. To allow the operation of UL aeroplanes in the 500-day period required for a change in legislation, TC will consider granting conditional exemptions to the existing regulations, provided they can be granted without adversely affecting aviation safety.

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## References

- A. Accidents involving Ultra-Light Aeroplanes
- B. Breakdown of Canadian Recreational Aeroplane Groups
- C. *Design Standards for Advanced Ultra-Light Aeroplanes* (TP 1014(I))
- D. Interim Policy - Advanced Ultra-Light Aeroplane

## 1.0 BACKGROUND

### 1.1 History

#### 1.1.1 History of Ultra-Light (UL) Aeroplanes in Canada

UL aeroplanes began as powered hang-gliders in the 1970's, and moved into motorized single and two place open cockpit aeroplanes in the early 1980's. Neither the aircraft nor the pilots were regulated in the early years. The combination of low levels of experience and minimal standards and regulations, led to a high accident rate in the early 1980's, as shown in Reference A. By the late 1980's, however, UL aeroplanes had evolved to two place, fully enclosed aeroplanes, quite capable of competing against entry level General Aviation aircraft (e.g., Piper Cubs, Aeroncas and Taylorcraft). The most significant progress is obvious in the design, construction and performance of the newer generation of UL aeroplanes. Many of these aircraft now feature fully enclosed cockpits, skinned fuselages, engines in the 90 horsepower range, electrical and dual ignition systems, and disc brakes. Some have high-lift devices and amphibious floats. Throughout this evolution, UL aeroplane manufacturers have continuously experimented with designs, construction and materials. Almost inevitably, as safety and convenience equipment was installed (e.g., electric starters and electrical systems, and larger engines to carry same), legislated weight limitations were broken at an increasing frequency.

UL aeroplane accidents peaked at 61 in 1984 (out of 1439 registered aeroplanes) and declined to 36 in 1989 (out of 3119 registered aeroplanes). Of the 362 UL aeroplane accidents recorded on the Transportation Safety Board of Canada's (TSBC) Aircraft Incident Data System (AIDS), 359 have been analyzed. In these, a structural or mechanical failure was cited in 34% of the occurrences; the remaining 66% involved human or environmental factors. Preliminary accident data from the TSBC for calendar year 1990 show that the total number of UL accidents has risen slightly and that fatal accidents and fatalities are up sharply. However, because the numbers involved are so low (i.e., a dozen or less), the value of current statistical data is questionable, requiring further analysis before a meaningful conclusion can be drawn. The Committee has developed a contract for an independent professional consultant to evaluate all ultra-light aeroplanes that do not meet the design standards or that do not qualify as amateur-built aeroplanes. This study will assist the Committee in identifying potential design defects amongst these aeroplanes. Although various standards have been developed either by U.S. aircraft manufacturer's associations or by the Airworthiness Authorities (UK BCAR Section S), no Canadian standards of airworthiness exist. In 1984, Transport Canada Senior Management directed the Airworthiness Branch to prepare design standards for UL aeroplanes, the purpose of which was to improve the safety of the UL aeroplanes in Canada. Since then, Transport Canada has urged the Canadian UL community to form a unified voice and to propose self-regulated

standards for aircraft serviceability and control. Also in 1984, Transport Canada promulgated the *Hang Glider and Ultra-Light Aeroplane Order* (Air Navigation Order, Series V, No. 24). This order provided for:

- the prohibition of passenger carrying except for dual instruction;
- VFR day only operation;
- conditional prohibition of operating near airports in controlled airspace;
- the requirement for UL aeroplanes to have safety harnesses; and
- the requirement for occupants to wear safety helmets.

In 1984, Transport Canada published Air Regulations which defined UL aeroplanes, including single and two seat instructional models, and in 1986 prescribed registration requirements.

#### 1.1.2 Policy Background

As previously stated, in 1984, Transport Canada's Senior Management requested the Airworthiness Branch to prepare design standards for ultra-light aeroplanes, to improve their safety.

Since 1984, Transport Canada has urged the ultra-light aviation community to form a unified voice and propose self-regulated standards for aircraft serviceability and control.

In July 1986, the Airworthiness Branch issued a conceptual approach to "Aircraft Recreational Vehicles" (ARV), which included ultra-light aeroplanes.

At two public meetings, (one on March 10th, 1987, in Ottawa, the other on March 27th, 1987, in Edmonton), Transport Canada reiterated the need for the ultra-light industry to rally as a unified voice, and to develop standards of aircraft serviceability and associated procedural controls.

On May 4th, 1987, the Ultra-light Manufacturers' Association of Canada (UMAC) was founded in Toronto. On June 19th, 1987, UMAC submitted to Transport Canada a new definition of "ultra-light aeroplane" allowing for increased weight. On June 24th, 1987, a representative from UMAC had a "brainstorming" session with the Chief of Airworthiness Standards. Further to that session, the first issue of the "Ultra-Light Aeroplane Policy" was developed.

On February 19th, 1988, S. Sinclair, President of UPAC, and M. Khouzam of Transport Canada, met in Ottawa to discuss and clarify the intent of the policy. The second revision of the policy reflected this discussion and attempted to eliminate any misinterpretation of the proposed policy.



On May 2nd, 1988, in Toronto, Transport Canada met representatives from UMAC, UPAC, CASTC, EAACC, EAAC and COPA to present and discuss this Policy. Following industry request, Transport Canada agreed to develop an amateur-built ultra-light aeroplane subcategory within the Amateur-Built Aircraft category. Also in May of 1989, the Light Aircraft Manufacturers' Association of Canada (LAMAC) was founded in Toronto (replacing UMAC). LAMAC requested changes to the ultra-light aeroplane definition: stall speed criteria instead of wing-load criteria and maximum level speed.

On September 7th, 1989, Transport Canada, LAMAC, UPAC, CASTC, EAACC, the Recreational Aircraft Association of Canada (RAAC - formerly EAAC) and COPA met in Toronto and signed a memorandum of understanding on the acceptance of this Policy and its implementation in two years. To this end, Transport Canada required an integrated policy, including:

- UL Aeroplane standards;
- UL Aeroplane Pilot Licensing standards;
- UL Aeroplane Operating standards; and
- all necessary supporting legislation.

To ensure that such an integrated policy was developed, the Director General, Aviation struck a Committee of specialist from all the areas in Transport Canada that had an operational interest in ultra-light aeroplanes. The objectives, strategy and policy of this committee are described in the following section.

## 1.2 Policy Objectives and Strategy

### 1.2.1 Objectives

The objectives of Transport Canada's Ultra-Light Aeroplane Committee were to:

- (a) Enhance the *safety* (i.e., the structural integrity, reliability and handling characteristics) of UL aeroplanes;
- (b) Develop a *personnel licensing system* that would enable the UL aeroplane community to grow and develop to its fullest potential;
- (c) Recognize the *recreational nature* of UL aeroplanes while considering enhanced aeroplane safety, pilot licensing standards, and self-regulatory controls as factors that would limit regulations only to those serving a useful safety purpose; and

- (d) Encourage within the UL aeroplane community, a *sense of discipline and self-determination* with emphasis placed on efficient and professionally applied self-regulating activities.

These objectives coincide with Transport Canada's primary objective and highest priority - safety - and the Federal Government's goals of public sector restraint and private sector economic renewal. Transport Canada created and tasked the Ultra-Light Aeroplane Committee with developing an integrated policy using input from the aviation community. The Committee met several times over the winter of 1989/90 to develop a policy proposal, which, in June of 1990, was sent out for industry comment.

### 1.2.2 Basic Policy Options

The Committee considered three policy options with respect to ultra-light aeroplanes:

- (a) Enforce the Status Quo

According to this option, any change in the existing regulations would blur the distinctions between the UL aeroplane community and the current general aviation sector. Persons content to operate "first-generation" UL aeroplanes would likely not object to this option, but the more advanced sector of the UL community would find this option highly restrictive. This option would definitely inhibit developments in UL aeroplane design, construction, performance, UL pilot training and any reasonable hope for a Canadian UL aeroplane manufacturing industry. This option also would require Transport Canada to expend scarce resources enforcing existing legislation.

- (b) Adopt a *Laissez Faire* Approach

This option assumes that any inconsistencies between the newer ultra-light aeroplane technology and the existing regulations are small enough to ignore, at least in the short term. Accidents involving UL aeroplanes are not a national issue, nor, given a general decline in the number of accidents since 1984, do they represent a major threat to the aviation industry as a whole. This option also argues that insurance, legal and other market forces would, in the absence of more Transport Canada regulations, provide an acceptable degree of self-regulation. This option excludes government from a sector of the aviation community whose essence is freedom from the regulation that is applied to the rest of the aviation industry. Moreover, this option would impose the least administrative burden on Transport Canada's limited resources. However, this option encourages disrespect for existing legislation and could lead to an unsafe situation, along with economic and regulatory turmoil within the UL aeroplane community. This option also ignores a viable

Canadian industry that has a potential world market and is ideally positioned for global leadership. As such, the Committee deemed it to be less desirable than the existing situation.

(c) **Revise Existing Legislation**

This option acknowledges that the newer ultra-light aeroplanes have surpassed existing Transport Canada legislation. It also recognizes the progress made in UL aeroplane design, construction and performance in the last few years, and is more likely to result in safe and lawful operations within the UL aeroplane community. However, the effort and process required to make an orderly transition will be moderately labour intensive for Transport Canada and thus time-consuming for the industry.

1.2.3 **Policy Strategy**

All options considered, the Committee recommended, and the Director General, Aviation Regulation accepted, the third option as being the most consistent with Transport Canada's objectives and with the needs of the UL aeroplane community.

1.3 **Policy Process**

1.3.1 **Affected Population**

The changes in Transport Canada's Ultra-Light Aeroplane Policy will primarily affect the following national groups:

- the Light Aircraft Manufacturers' Association of Canada (LAMAC);
- the Ultra-Light Pilots' Association of Canada (UPAC);
- the Recreational Aircraft Association of Canada (RAAC);
- the Experimental Aircraft Association - Canadian Council (EAA/CC);
- the Canadian Aero Sport Technical Committee (CASTC);
- the Canadian Owners' and Pilots' Association (COPA);
- the Canadian Air Line Pilots' Association (CALPA);
- the Canadian Business Aircraft Association (CBAA);
- the Air Transport Association of Canada (ATAC); and
- the Canadian Agricultural Aircraft Association (CAAA).

In June, 1990, the Committee sent a draft policy proposal to interested parties on Transport Canada's Consultation List with an invitation for comment. Upon receipt and review of these comments on October 25, 1990, the policy was revised. The resulting final policy paper was approved in principle on January 11, 1991, by the Director General, Aviation Regulation, subject only to a final review on February 19, 1991, by interested parties.

The Committee also reviewed a 1987 report by an Australian Parliamentary Committee which was charged with inquiring into the regulation of ultra-light aeroplanes in that country. The committee felt compelled to assess these recommendations as well, to ensure that no important issues had been overlooked.

## 2.0 TC ULTRA-LIGHT AEROPLANE POLICY

### 2.1 Definitions

The following definitions apply:

**"Advanced Ultra-Light Aeroplane" (AULA)** means a propeller driven aeroplane designed to carry a maximum of two persons, including the pilot, and having:

- (a) in the case of a land-plane, a maximum take-off mass (weight, MTOMax) of:
  - (1) 285.0 Kg (628.3 lb) for a single place aeroplane, or
  - (2) 480.0 Kg (1058.2 lb) for a two-place aeroplane; or
- (b) in the case of a seaplane, an additional mass (weight) allowance of:
  - (1) 35 Kg (77.2 lb) for a single place aeroplane, or
  - (2) 70 Kg (154.4 lb) for a two-place aeroplane; and
- (c) a maximum stalling speed in the landing configuration ( $V_{so}$ ), at manufacturer's recommended maximum take-off weight not exceeding 72 km/h (45 mph) indicated airspeed (IAS).

**"Amateur-Built Ultra-Light Aeroplane"** means an aeroplane built and inspected in accordance with Chapter 549 of the Airworthiness Manual that also meets the stall speed and maximum weight criteria published in TP 10141, *Design Standards for Advanced Ultra-Light Aeroplanes*.

**"Declaration of Compliance" (DoC)** means a written declaration by a *Manufacturer* attesting that the *Type Definition* for a particular make and model of aeroplane complies with design standards published in TP 10141.

***Design Standards for Advanced Ultra-Light Aeroplanes (TP 10141)*** means standards for the design of *Advanced Ultra-Light Aeroplanes* that have been proposed by the *Ultra-Light Aeroplane Central Technical Committee* and accepted by the Minister.

**"Industry Representative"** means an individual so designated by a *Manufacturer* or the *Ultra-Light Aeroplane Central Technical Committee* and accepted by the Minister whose duties may include:

- assessing AULA status with respect to aeroplane assembly, the *Manufacturer's Fitness Inspection*, *Mandatory Actions*, *Modifications* and quality and currency of maintenance, and
- performing such other tasks as the *Manufacturer* or *Ultra-Light Aeroplane Central Technical Committee* may recommend and the Minister may accept.

**"Mandatory Action"** means an action taken with respect to an *Advanced Ultra-Light Aeroplane*, which, in the opinion of the *Manufacturer*, if not taken, would result in an unsafe or potentially unsafe condition.

**"Manufacturer"** means a person or company that designs and/or builds *Advanced Ultra-Light Aeroplanes*, and in the absence of the *Manufacturer*, means an *Industry Representative* designated by the *Ultra-Light Aeroplane Central Technical Committee* and accepted by the Minister to act on the *Manufacturer's* behalf.

**"Manufacturer's Fitness Inspection"** means a safety inspection, prescribed by the *Manufacturer* and certified by the owner, that provides for inspection of the major structure and critical components of an *AULA* or ultra-light aeroplane upgrading to *AULA* status, as well as a general evaluation of materials and workmanship.

**"Modification"** means any deviation from the *Type Definition* that would compromise the structural integrity, performance, centre of gravity, serviceability or crashworthiness of an *Advanced Ultra-Light Aeroplane*.

**"Statement of Conformity" (SoC)** means a document upon which:

- a *Manufacturer* attests that a specific aeroplane will, when assembled in accordance with the assembly instructions, conform to the *Manufacturer's Type Definition* as declared in a *Declaration of Compliance*, and
- the registered owner states that the aeroplane was assembled in accordance with the *Manufacturer's* assembly instructions (or, if applicable, that the *Manufacturer's Fitness Inspection* has been conducted), that no modifications have been made without written approval from the *Manufacturer*, and that all applicable *Mandatory Actions* have been completed.

**"Type Definition"** means the *Manufacturer's* technical specifications, drawings, calculations, assembly instructions and other documented material.

**"Ultra-Light Aeroplane Central Technical Committee"** means a committee made up from representatives of the Canadian Aerosport Technical Committee, the Experimental Aircraft Association Canadian Council, the Light Aircraft Manufacturer's Association of Canada, the Recreational Aircraft Association of Canada and the Ultra-Light Pilots Association of Canada, and such other organizations as the Committee wishes to admit.

## 2.2 Policy Statements

### 2.2.1 General Policy

Transport Canada supports the development of the ultra-light (UL) industry in Canada and is committed to enhancing the safety of UL aeroplanes and the standards of UL aeroplane pilots. TC also supports the concept of a largely self-regulated recreational UL community.

### 2.2.2 Specific Policy Statements

#### (a) Ultra-Light Aeroplane Standards

##### (i) Design Standards

1. The Minister will consider, for possible acceptance, such standards for *Advanced Ultra-Light Aeroplanes* that may be submitted by the *Ultra-Light Aeroplane Central Technical Committee*.
2. The Minister will accept those standards, which, in his opinion, will provide the required level of safety for *Advanced Ultra-Light Aeroplanes*.
3. The Minister accepts the *Design Standards for Advanced Ultra-Light Aeroplanes (TP 10141)*, as having met the required level of safety for *Advanced Ultra-Light Aeroplanes*.
4. These standards may be amended after consultation with the *Ultra-Light Aeroplane Central Technical Committee* and may be supported by advisory material.

##### (ii) Manufacturing Standards

1. *Manufacturers* will ensure that their final product conforms to the *Type Definition* by quality assurance procedures.
2. "Manufactured" or "Kit-Built". *Advanced Ultra-Light Aeroplanes* that are fully assembled and test-flown by the *Manufacturer* are considered to be "manufactured". These aeroplanes may be partially disassembled for shipment. *AULA's* that are other than "manufactured" are considered to be "kit-built" *AULA's* and will be subject to an initial operating restriction.

## (iii) Manufacturer's Fitness Inspection

1. *Advanced Ultra-Light Aeroplanes* that are subject to a change in ownership, or ultra-light aeroplanes that are upgrading to *Advanced Ultra-Light Aeroplane* status, must undergo a *Manufacturer's Fitness Inspection* prior to registration.
2. The *Manufacturer's Fitness Inspection* is an inspection which has been designed by the *Manufacturer* of a particular make and model of *AULA* and which when completed, will offer a comparable level of safety to an *AULA* assembled in accordance with the assembly instructions. This inspection is necessary because a fully assembled aeroplane cannot be evaluated completely enough for a person to declare conformity.

## (iv) Maintenance Program and Records

1. *Manufacturers* will supply, with each *Advanced Ultra-Light Aeroplane* sold, a recommended maintenance program specifying the inspection schedule and maintenance procedures required for continuing serviceability.
2. Documentary evidence that the *Advanced Ultra-Light Aeroplane* has been maintained in accordance with the *Manufacturer's* maintenance program shall be maintained and made available to Transport Canada or an *Industry Representative* upon request. Maintenance records shall also include details on *Mandatory Action* notifications and *Modifications*.
3. A copy of all *Manufacturer's Fitness Inspection* reports shall be retained and attached to the maintenance record.

## (v) Mandatory Action

1. *Manufacturers* must support their products by notifying registered owners of the corrective measures for all potentially unsafe conditions resulting from the operation of their products. This notification will be in the form of a *Mandatory Action*.
2. *Advanced Ultra-Light Aeroplane* owners will complete *Mandatory Actions* in the manner and the time frame prescribed by the *Manufacturer*.



3. Activity undertaken in response to a *Mandatory Action* shall be described in the *Advanced Ultra-Light Aeroplane* maintenance records.

*Note: Disputes over the validity of any Mandatory Action will be resolved by the Ultra-light Aeroplane Central Technical Committee.*

(vi) Industry Representatives

1. *Manufacturers* and/or the *Ultra-Light Aeroplane Central Technical Committee* will nominate qualified *Industry Representatives* whose background, reputation and knowledge qualify them to assess:
  - a. the quality of assembly of an *AULA* measured against the *Manufacturer's* assembly instructions or *Fitness Inspection*,
  - b. the completeness of a specific *Mandatory Action* as well as the status of all *Mandatory Actions* issued to a particular *AULA* make and model,
  - c. the likelihood that a change or addition to an *AULA* will constitute a *Modification* requiring the *Manufacturer's* approval, and
  - d. the status and quality of maintenance and continuing serviceability.

*Note: Where a Manufacturer is unavailable, unable or unwilling to approve a Modification, an Industry Representative may apply to the Ultra-Light Aeroplane Central Technical Committee for the authority to approve Modifications for a specific make and model of Advanced Ultra-Light Aeroplane.*

2. While the *AULA* owner is responsible for the above items, the *Industry Representative* provides a valuable source of knowledge upon which the *AULA* owner can draw.

## (vii) Declaration of Compliance (DoC)

1. *Manufacturers* wishing to make a *Declaration of Compliance* must certify, in writing, that the make and model of *Advanced Ultra-Light Aeroplane* is in compliance with design standards published in TP 10141. The *Manufacturer* must also certify that the *Type Definition* is available for inspection or retention on request by the Minister or by the *Ultra-Light Aeroplane Central Technical Committee*. *Declarations of Compliance* should be sent to:

Chief, Aircraft Registration (AARCE)  
 Transport Canada Aviation  
 6th Floor, 200 Kent Street,  
 Ottawa, Ontario K1A 0N8  
 Fax (613) 990-6215 Phone (613) 990-1109

## (viii) Statement of Conformity (SoC)

1. *Manufacturers* whose products allow them to do so, shall issue a *Statement of Conformity* with each aeroplane sold. When satisfied that an aeroplane qualifies, *Manufacturers* may also issue *Statements of Conformity* to *Advanced Ultra-Light Aeroplanes* of the same make and model, where the aeroplane was produced prior to this policy coming into force, provided the owner has been issued a copy of the *Manufacturer's Fitness Inspection* as well.
2. A copy of the *Statement of Conformity* must accompany the application for registration when the *AULA* is new and when it is re-registered following a sale.
3. The *Statement of Conformity* must be carried onboard an *AULA* at all times during flight time.
4. The *Manufacturer* shall certify on the *Statement of Conformity* that the *AULA*, when assembled in accordance with the assembly instructions, will conform to the aeroplane *Type Definition*.
5. When assembly is completed on a new *Advanced Ultra-Light Aeroplane*, the registered owner shall attest that the aeroplane has been assembled in accordance with assembly instructions provided by the *Manufacturer*, that the *AULA* has not been modified without written permission from the *Manufacturer*, and

that all applicable *Mandatory Actions* have been completed. (The *Manufacturer* will sign where he assembled the *AULA*.)

6. If the aeroplane was registered previously as an ultra-light aeroplane, or if it is an *AULA* that is subject to a change of ownership, the person re-registering the aeroplane as an *AULA* shall certify that the *Manufacturer's Fitness Inspection* has been conducted, that the *AULA* has not been modified without approval and that all *Mandatory Actions* have been completed.

*Note: If unsure as to the status of the AULA, the registered owner should have the aeroplane evaluated by the Manufacturer or an Industry Representative.*

*Note: Where the AULA is subject to a change of ownership, the previous owner's SoC is valid for a period of 60 days when signed by both the previous and new owner. This is the same period as the Interim Registration and provides time for the new owner to contact the Manufacturer and obtain a personalized SoC prior to submitting documentation for the change of registration. This permits continued operation of the aeroplane during a 60 day period and should be sufficient time for the administrative process to take place.*

7. The *Statement of Conformity* document shall include:
  - a. *Manufacturer's* name and address;
  - b. *Advanced Ultra-Light Aeroplane* make, model and serial number;
  - c. a declaration, signed by the *Manufacturer*, stating that the aeroplane make and model, when assembled in accordance with the *Manufacturer's* assembly instructions, will conform with the *Type Definition* that complies with design standards published in TP 10141, *Design Standards For Advanced Ultra-Light Aeroplanes*;
  - d. the registered owner's name and address;
  - e. certification by the *AULA* registered owner that the aeroplane has been assembled in accordance with the *Manufacturer's* assembly instructions (or if applicable, that the *Manufacturer's Fitness Inspection* has been

conducted), no modifications have been made to the *AULA* without written approval from the *Manufacturer*, and all applicable *Mandatory Actions* have been completed;

- f. the date of issuance by the *Manufacturer*;
  - g. the date of certification by the registered owner; and
  - h. the change of ownership declaration by the previous owner, stating that the aeroplane has been maintained in accordance with the *Manufacturer's* maintenance schedule, that all *Mandatory Actions* have been completed, and that no modifications have been made to the aeroplane without written approval from the *Manufacturer*;
  - i. the date of the previous owner's change of ownership declaration;
  - j. the change of ownership declaration by the new owner, stating that the aeroplane has been inspected in accordance with the *Manufacturer's Fitness Inspection*; and
  - k. the date of the new owner's change of ownership declaration.
8. The *Statement of Conformity* will remain valid provided:
- a. the *Advanced Ultra-Light Aeroplane* is maintained in accordance with the *Manufacturer's* maintenance program;
  - b. all applicable *Mandatory Actions* are completed within the required time frame;
  - c. no *Modification* is made to the aeroplane without written permission from the *Manufacturer*; and
  - d. records of continuing maintenance, *Mandatory Actions*, *Modifications*; and *Manufacturer's Fitness Inspection* reports are maintained and made available to the Minister or an *Industry Representative* upon request.

## (ix) Amateur-Built Ultra-Light Aeroplanes

1. Subject to paragraph 2, aeroplanes that have been built in accordance with Chapter 549 of the Airworthiness Manual (i.e., built at least 51% by the owner) may be operated by holders of a Private Pilot Licence - Ultra-Light Aeroplane (PPL-UL) or a Commercial Pilot Licence - Ultra-Light Aeroplane (CPL-UL) provided the aeroplane meets the weight and stall speed criteria for *Advanced Ultra-Light Aeroplanes*.
2. The statement "qualifies as an *Advanced Ultra-Light Aeroplane*" shall appear on the Special Certificate of Airworthiness.
3. When flown by a PPL-UL or CPL-UL licensed pilot, operation of the aeroplane is restricted to the privileges of the UL pilot license, thus, passenger carriage and open access to controlled airspace is not permissible unless the restrictions have been removed from the UL pilot licence.

## (x) Flight Authority

1. *Advanced Ultra-Light Aeroplanes* will operate under the authority of the Certificate of Registration (C of R). The C of R is issued on the basis of the aeroplane meeting design standards published in TP 10141, as determined by a *Statement of Conformity*, thus, when the SoC becomes invalid for any reason, the C of R is deemed to be cancelled.
2. *Advanced Ultra-Light Aeroplanes* operating under the authority of the subject Exemption shall display the following placard in a position where it can readily be seen by persons entering the aeroplane:

"Notice: This aeroplane is operating without a Certificate of Airworthiness,  
Avis: Cet avion vole sans Certificat de Navigabilité."

3. UL aeroplanes registered prior to Jan 1, 1993, or UL single place aeroplanes registered after Jan 1, 1993, will operate under the authority of the C of R providing the aeroplanes meet the definition for UL single place aeroplane or UL two place instructional aeroplane, as applicable.

4. *Amateur-Built Ultra-Light Aeroplanes* shall comply with the requirements of Chapter 549 of the Airworthiness Manual and will operate under the authority of a Special Certificate of Airworthiness issued according to Chapter 507 of the Airworthiness Manual.

(xi) Registration

1. New Advanced Ultra-Light Aeroplanes. Application for registration of a new *Advanced Ultra-Light Aeroplane* shall be made when the *Statement of Conformity* has been signed by the *Manufacturer* and the *AULA* owner.

The following is required to register a new *Advanced Ultra-Light Aeroplane*:

- a. the applicable fee;
  - b. proof of ownership;
  - c. a copy of the *Statement of Conformity*;
  - d. an etched imprint or facsimile of the aircraft identification plate; and
  - e. an Application for Registration of Ultra-Light Aeroplane (form 26-0298).
2. Registered UL Aeroplanes. To qualify for the privileges accorded to the *AULA*, aeroplanes that are currently registered as ultra-light aeroplanes must be re-registered. This means that the owner must contact the *Manufacturer* and obtain a *Statement of Conformity* and *Manufacturer's Fitness Inspection*.

The following is required for registration of an *Advanced Ultra-Light Aeroplane* where the aeroplane was previously registered as an ultra-light aeroplane:

- a. the white copy of the Certificate of Registration;
- b. an application for Registration of Ultra-Light Aeroplane (form 26-0298)
- c. a copy of the *Statement of Conformity*;

- d. an etched imprint or facsimile of the aircraft identification plate; and
- e. the applicable fee for amendment to the C of R.

*Note: The aeroplane may continue to be operated as an ultra-light aeroplane on the pink copy of the previous owner's certificate of registration, however, the additional privileges of passenger carriage and access to controlled airspace cannot be exercised until the owner is in possession of the new C of R and an appropriate pilot licence.*

3. Change of Ownership - Advanced Ultra-Light Aeroplane. To register an *Advanced Ultra-Light Aeroplane* following a change of ownership, the following must be forwarded to a Transport Canada Aviation Regional Office:

- a. proof of ownership,
- b. an application for registration of an ultra-light aeroplane (this is on the reverse of the Certificate of Registration),
- c. a copy of the *Statement of Conformity*, and
- d. the applicable fee.

*Note: The aeroplane may continue to be operated as an Advanced Ultra-Light Aeroplane for a period of 60 days on authority of the Interim Registration and the previous owner's SoC.*

(xii) Registration Cancellation

- 1. The registration of AULAs will be cancelled when the *Statement of Conformity* becomes invalid.

(xiii) Registration Marks

- 1. *Advanced Ultra-Light Aeroplanes* will be issued registration marks in the C-Fxxx or C-Gxxx series. This will permit a clear distinction between the ultra-light aeroplane and the *Advanced Ultra-Light Aeroplane*.

## (xiv) After January 1, 1993

1. All factory production or kit-built two place ultra-light aeroplanes must meet design standards published in TP 10141.
2. Ultra-light single place aeroplanes having a launch weight of not more than 165 kg. will not have to meet design standards published in TP 10141.
3. All Ultra-Light Two Place Instructional Aeroplanes and all Ultra-Light Single Place Aeroplanes (ultra-light aeroplanes without a *Statement of Conformity*) that were on the Civil Aircraft Register prior to January 1, 1993, may continue to be operated, sold or transferred on the Registry, provided they comply with the Air Regulations and Air Navigation Orders in effect before January 1, 1993.

## (xv) Overweight Ultra-Light Aeroplanes (prior to Jan 1, 1993)

1. Where safety is not compromised, TC will allow, under the terms of an amnesty arrangement, those aeroplanes that do not meet design standards published in TP 10141, to continue operating at up to 1.2 times their originally specified launch weight.
2. Owners of ultra-light aeroplanes taking advantage of this amnesty program shall seek the advice of the *Manufacturer* and an *Industry Representative* on:
  - a. the condition of their aeroplane for the intended operation; and
  - b. a maintenance and inspection program that would reasonably assure the continued serviceability of the aeroplane operated in the intended environment.
3. Qualification for the proposed amnesty must be concluded by Dec 31, 1992, and can be accomplished by submitting an Application to Register an Ultra-Light Aeroplane, with the revised launch weight so indicated, to a Transport Canada Aviation Regional Office together with supporting documentation signed by a *Manufacturer* or an *Industry Representative*.



(xvi) Operation of Ultra-Light Two Place Instructional Aeroplanes

1. Ultra-Light Two Place Instructional Aeroplanes (no *Statement of Conformity*) may be operated:

- a. as an Ultra-Light Two Place Instructional Aeroplane, either in accordance with its original launch weight (being not more than 195 kg.) or in accordance with the amnesty program, in which case the owner must cause to be displayed in clear view of both occupants the following placard:

"Notice: The carriage of persons for other than for flight instruction is strictly prohibited. Avis: Le transport de personnes, sauf pour but de formation en vol, est strictement interdit."

or

- b. as an Ultra-Light Single Place Aeroplane at a maximum launch weight of 195 kg. (may be eligible for amnesty as outlined previously) with one seat and set of controls removed or rendered unusable, in which case the owner must cause to be displayed in clear view of the pilot-in-command the following placard:

"Notice: The carriage of any person other than the pilot-in-command is strictly prohibited. Avis: Le transport de personnes, autre que le pilote command de bord, est strictement interdit."

(b) **Ultra-Light Pilot Standards**

(i) **Existing Privileges**

1. The existing Private Pilot Licence - Ultra-Light Aeroplane (PPL-UL) will continue to provide licensing privileges for pilots choosing to operate an ultra-light aeroplane or *AULA* without passengers onboard. Flight will continue to be restricted to uncontrolled airspace outside of a 5 NM radius from an airport, unless prior permission is obtained from the airport operator or an air traffic control clearance is obtained by two-way radio voice communication from the appropriate airport control tower unit.
2. Pilots holding an existing Commercial Pilot Licence - Ultra-Light Aeroplane (CPL-UL) on the date of implementation will be permitted to continue instructing student pilots undertaking training for the PPL-UL licence with the passenger and controlled airspace restrictions attached.

(ii) **Private Pilot Licence - Aeroplane (PPL-A)**

1. The current acceptable standard for pilots operating an *AULA* with a passenger onboard or in controlled airspace is the PPL-A.

(iii) **Private Pilot Licence - Ultra-Light Aeroplane (PPL-UL)**

1. TC will consider proposals from competent and responsible organizations that will result in the removal from the PPL-UL licence of the restrictions from carrying a passenger and from operating in controlled airspace. For passenger carrying purposes, land and sea ratings will be endorsed on PPL-UL licences.
2. Industry proposals for these additional licence privileges will include standards, a training syllabus and a certification program found acceptable to the Minister.

(iv) **Commercial Pilot Licence - Ultra-Light Aeroplane (CPL-UL)**

1. TC will consider proposals from competent and responsible organizations identifying the training and qualifications required of an enhanced Commercial Pilot Licence - Ultra-Light

Aeroplane (CPL-UL) to instruct and recommend PPL-UL holders for additional privileges.

2. Industry proposals for these additional licence privileges will include standards, a training syllabus and a certification program found acceptable to the Minister.

(v) Training and Qualification Proposals

1. Upon certification by an Authorized Person that the applicant has satisfied the requirements of the approved training program, the Minister, on being satisfied, may endorse the applicant's ultra-light pilot licence.

(v) Medical Standards

1. Subject to confirmation from Health and Welfare Canada, the medical requirements for the UL category of licences will be Category 4 for PPL-UL and Category 3 for CPL-UL.

(vi) Crediting of Flight Time

1. Additional training leading to a full Private Pilot Licence - Aeroplane (PPL-A) will be encouraged by allowing PPL-UL licensed pilots to increase the creditable portion of their previous UL flying experience (dual and solo) towards their PPL-A licence. The formula for this credit will be proposed by the industry subject to the approval of the Minister.

(c) Ultra-Light Aeroplane Operating Standards

(i) Initial Operating Restriction (IOR) - Kit-Built *Advanced Ultra-Light Aeroplanes*

1. Where any percentage of assembly of an *AULA* is done by other than the *Manufacturer* (i.e., kit-built), an initial operating restriction will be imposed.
2. The Initial Operating Restriction will be considered withdrawn when the aeroplane has operated for a period of 5 hours during which time the aeroplane required only the maintenance, repair and inspection associated with normal aeroplane operations.

3. Operation during the Initial Operating Restriction period is restricted to the following:
  - (A) carriage of passengers is prohibited, and
  - (B) the aeroplane shall not be flown over any built-up area or open air assembly of people.

(ii) Operations

1. Subject to the Initial Operating Restriction, two-place *Advanced Ultra-Light Aeroplanes* for which a *Statement of Conformity* has been issued may be used for recreational purposes, including the carriage of a passenger, flying training, rental and other approved, non-commercial special purpose flight operations.
2. Subject to the Initial Operating Restriction, single-place *Advanced Ultra-Light Aeroplanes* for which a *Statement of Conformity* has been issued may be used for recreational purposes, flying training (student solo), rental and other approved, non-commercial special purpose flight operations.
3. Ultra-Light Two-Place Aeroplanes for which no *Statement of Conformity* has been issued are restricted to flying with no passengers and operating in uncontrolled airspace (subject to authority to enter as per ANO V, No. 24). These aeroplanes may continue to be used for flying training.
4. Ultra-Light Single Place Aeroplanes for which no *Statement of Conformity* has been issued may be used for recreational purposes, flying training (student solo) and aeroplane rental and are restricted to operating in uncontrolled airspace (subject to authorization granted pursuant to ANO V, No. 24).
5. Operation of an ultra-light aeroplane or an *Advanced Ultra-Light Aeroplane* with another PPL-UL or higher rated pilot onboard will be permitted.

*Note: Special purpose non-commercial flight operations that may be approved by the Minister include farmers engaged in aerial application operations on their own fields.*

(iii) Airspace

1. The operation of *Advanced Ultra-Light Aeroplanes* in controlled airspace will be permitted provided:
  - a. the initial operating restriction has been withdrawn;
  - b. aircraft equipment requirements and procedures published in the ANOs are complied with, and
  - c. the aeroplane is operated by the holder of a PPL-UL (with the controlled airspace restriction removed) or higher licence.
2. *Advanced Ultra-Light Aeroplanes* operated by the holder of a PPL-UL with the controlled airspace restriction attached will require authority pursuant to ANO V, No. 24, prior to entering controlled airspace.

(iv) Equipment

1. *Advanced Ultra-Light Aeroplanes* may be operated without need for the occupants to wear protective helmets.

(d) Compliance

1. Anyone found guilty of making a false statement for the purpose of obtaining a Canadian Aviation Document will be subject to prosecution.
2. Ultra-Light or *Advanced Ultra-Light Aeroplanes* in respect of which false statements have been made are liable to have their Certificates of Registration suspended or cancelled.
3. Persons who have made false statements, declarations, or certifications about any particular make or model of ultra-light aeroplane or *Advanced Ultra-Light Aeroplane*, must accept full responsibility for such aeroplane(s) being stricken from the Canadian Civil Aircraft Register.

### 3.0 IMPLEMENTATION

#### 3.1 Consequential Legislative Amendments

The following legislation may be affected by Transport Canada's Ultra-Light Aeroplane Policy:

##### 3.1.1 Air Regulations

s. 101 (1) Definition of "*Advanced Ultra-Light Aeroplane*", "*Ultra-Light Single-Place Aeroplane*" and "*Ultra-Light Two-Place Instructional Aeroplane*".

s. 210 Requirement for a *Statement of Conformity* to be issued in respect of an *Advanced Ultra-Light Aeroplane*.

s. 211 (4)

##### 3.1.2 Air Regulations, New Series

Series II,

- no. 1 - Aircraft Identification Plates
- no. 2 - Aircraft Marking and Registration

Series IV,

- no. 1 - Licensing of flight crew members
- no. 4 - Medical fitness requirements for the licensing of aviation personnel
- no. 6 - Flight crew ratings

Series V,

- Airworthiness Information Report

Series VI,

- Manufacturers of aeronautical products
- no. 1 - Definition of "*Advanced Ultra-Light Aeroplane*"
- no. 3 - Operation of Aircraft, Aircraft Requirements

- no. 6 - Operational Flight Planning
- no. 10 - Liability Insurance
- no. 20 - Sport Aviation
- no. 29 - Use of Equipment

Series VII,

- no. 3 - Small aeroplanes

### 3.1.3 Air Navigation Orders

Series II,

- no. 2 - Safety Belts, s. 3(1)
- no. 19 - Day VFR Flight Instruments

Series IV,

- no. 1 - Personnel Licences, s. 2(1)
- no. 2 - Pilot Licence Privileges, s. 3, 15, 20.

Series V,

- no. 12 - Survival Equipment and Radio Communication System
- no. 24 - Hang Glider and Ultra-Light Aeroplane Operations in Canadian Airspace
  - s. 3 Prohibition to carry passengers
  - s. 7 Flight operations in controlled airspace
  - s. 9 Protective helmet

Series VII,

- no. 1 - Crop spraying
- no. 3 - Small aeroplanes

### 3.1.4 Enabled Publications

- Personnel Licensing Handbook
- Aeronautical Information Publication (AIP)
- Chapter 549 of the Airworthiness Manual

### 3.2 Finalization

The preceding policy has been approved-in-principle by the Director General, Aviation Regulation. The Committee has taken final comments from interested parties at meetings held in Toronto in March and April, 1991. Based upon these consultation meetings, the Committee presents this policy paper.

### 3.3 Approval

On the basis of reasonable consensus within the Committee and the Canadian Aviation Community, this policy will be approved in final by the Director General, Aviation Regulation and will lead to rule making in the areas specified.

### 3.4 Interim Policy

To allow the operation of *Advanced Ultra-Light Aeroplanes* in the 500-day period required for a change in legislation, Transport Canada will, on the basis of an equivalent level of safety, consider granting conditional exemptions to the existing regulations. These exemptions will permit portions of this policy to be put into effect prior to legislation implementation. Operators taking advantage of this interim policy must comply with all conditions attached to the exemption. The Interim Policy dated October 10, 1991, is attached as Appendix D.

### 3.5 Policy Amendment

Activation of the Interim Policy will permit refinements to be made to the *Advanced Ultra-Light Aeroplane* program prior to promulgation of enabling legislation, thus, it may be necessary to amend this Ultra-Light Aeroplane Policy. This will be done following consultation with the *Ultra-Light Aeroplane Central Technical Committee*. Where the change will affect persons or organizations outside of the UL community, consultation with the appropriate associations or groups will take place.



10 Oct 91

TRANSPORT CANADA INTERIM POLICY  
ADVANCED ULTRA-LIGHT AEROPLANES

General

As stated in the Ultra-Light Aeroplane Policy, Transport Canada Aviation (TCA) recognizes the recreational nature of ultra-light (UL) aeroplanes, and to this end, TCA has expressed the commitment to limit regulations only to those which serve safety purposes. This is considered achievable by encouraging, within the UL aeroplane community, a sense of discipline and self-determination with emphasis placed on efficient and professionally applied self-regulating activities.

This self-regulating philosophy is based on the understanding that the UL community (manufacturers, suppliers, owner/operators) will develop controls that will address the areas of design standards, manufacturing, maintenance and continuing serviceability, as well as providing procedures that will assist the operator to meet the intent of the controls.

During the period leading up to implementation of new legislation, Transport Canada is prepared to allow the operation of qualifying ultra-light aeroplanes through issuance of an Exemption from current regulations (attached as Appendix A). This Exemption will provide benefits beyond the scope of the ultra-light aeroplane regulations currently in force and will include conditions under which the aeroplane is permitted to be operated.

TCA will require UL aeroplane manufacturers and operators to implement controls and procedures that address the requirements stated in the Exemption conditions.

*Note: To differentiate between ultra-light aeroplanes that meet design standards and those that do not, the term Advanced Ultra-Light Aeroplane (AULA) will be used for UL aeroplanes that meet design standards published in TP 10141, Design Standards For Advanced Ultra-Light Aeroplanes.*

*It is intended that controls and procedures be realistic and pertinent. During the formative period before introduction of new legislation, members of the UL community are encouraged to make recommendations to Transport Canada on how best to accomplish the stated policy objectives.*

*When directed to contact Transport Canada for any matter pertaining to this document, the following address is to be used:*

Transport Canada (AARCAD)  
Transport Canada Building  
Place de Ville, Ottawa, Ontario  
K1A 0N8

Attention: Inspector Lindsay Cadenhead  
Tel 613-990-1036 Fax 613-990-6715

## Definitions

For the purposes of the subject Exemption, the following definitions will be used:

**"Advanced Ultra-Light Aeroplane" (AULA)** means a propeller driven aeroplane designed to carry maximum of two persons, including the pilot, and having:

- (a) in the case of a land-plane, a maximum take-off mass (weight, MTOmax) of:
  - (1) 285.0 Kg (628.3 lb) for a single place aeroplane, or
  - (2) 480.0 Kg (1058.2 lb) for a two-place aeroplane; or
- (b) in the case of a seaplane, an additional mass (weight) allowance of:
  - (1) 35 Kg (77.2 lb) for a single place aeroplane, or
  - (2) 70 Kg (154.4 lb) for a two-place aeroplane; and
- (c) a maximum stalling speed in the landing configuration ( $V_{so}$ ), at manufacturer's recommended maximum take-off weight not exceeding 72 km/h (45 mph) indicated airspeed (IAS).

**Amateur-Built Ultra-Light Aeroplane** means an aeroplane built and inspected in accordance with Chapter 549 of the Airworthiness Manual that also meets the stall speed and maximum weight criteria published in TP 10141, *Design Standards For Advanced Ultra-Light Aeroplanes*.

**Declaration of Compliance (DoC)** means a written declaration by a *Manufacturer* attesting that the *Type Definition* for a particular make and model of aeroplane complies with design standards published in TP 10141.

**Design Standards for Advanced Ultra-Light Aeroplanes (TP 10141)** means standards for the design of *Advanced Ultra-Light Aeroplanes* that have been proposed by the *Ultra-Light Aeroplane Central Technical Committee* and accepted by the Minister.

**Industry Representative** means an individual so designated by a *Manufacturer* or the *Ultra-Light Aeroplane Central Technical Committee* and accepted by the Minister whose duties may include:

- assessing AULA status with respect to aeroplane assembly, *Manufacturer's Fitness Inspections*, *Mandatory Actions*, *Modifications* and quality and currency of maintenance, a
- performing such other tasks as the *Manufacturer* or *Ultra-Light Aeroplane Central Technical Committee* may recommend and the Minister may accept.

**Mandatory Action** means an action taken with respect to an *Advanced Ultra-Light Aeroplane*, which in the opinion of the *Manufacturer*, if not taken, would result in an unsafe or potentially unsafe condition.

**Manufacturer** means a person or company that designs and/or builds *Advanced Ultra-Light Aeroplanes*, and in the absence of the *Manufacturer*, means an *Industry Representative* designated by the *Ultra-Light Aeroplane Central Technical Committee* to act on the *Manufacturer's* behalf.

**Manufacturer's Fitness Inspection** means a safety inspection, prescribed by the *Manufacturer* and certified by the owner, that provides for inspection of the major structure and critical components of an *AULA* or ultra-light aeroplane upgrading to *AULA* status, as well as a general evaluation of materials and workmanship.

**Modification** means any deviation from the *Type Definition* that would compromise the structural integrity, performance, centre of gravity, serviceability or crashworthiness of the *Advanced Ultra-Light Aeroplane* in question.

**"Statement of Conformity" (SoC)** means a document upon which:

- a *Manufacturer* attests that a specific aeroplane will, when assembled in accordance with the assembly instructions, conform to the *Manufacturer's Type Definition* as declared in a *Declaration of Compliance*, and
- the registered owner states that the aeroplane was assembled in accordance with the *Manufacturer's* assembly instructions (or, if applicable, that the *Manufacturer's Fitness Inspection* has been conducted), that no modifications have been made without written approval from the *Manufacturer*, and that all applicable *Mandatory Actions* have been completed.

**Type Definition** means the *Manufacturer's* technical specifications, drawings, calculations, assembly instructions and other documented material.

**Ultra-Light Aeroplane Central Technical Committee** means a committee made up from representatives of the Canadian Aerosport Technical Committee, the Experimental Aircraft Association Canadian Council, the Light Aircraft Manufacturer's Association of Canada, the Recreational Aircraft Association of Canada and the Ultra-Light Pilots Association of Canada, and such other organizations as the Committee wishes to admit.

## **Design Standards**

### **Advanced Ultra-Light Aeroplane**

Design standards published in TP 10141, *Design Standards for Advanced Ultra-Light Aeroplanes*, have been accepted by the Minister and are the basis upon which the subject Exemption is issued.

*Manufacturers* may obtain authority for qualifying aeroplanes to be registered as *Advanced Ultra-Light Aeroplanes* by providing a *Declaration of Compliance* to Transport Canada.

### Amateur-Built Ultra-Light Aeroplanes

Aeroplanes that have been built in accordance with Chapter 549 of the Airworthiness Manual and which also meet the weight and stall speed criteria for *AULAs* as published in TP 10141, may be operated by holders of an ultra-light aeroplane pilot licence provided the aeroplane is operated in accordance with the Exemption conditions of Appendix E.

### Declaration of Compliance (DoC)

*Manufacturers* wishing to make a *Declaration of Compliance* must certify in writing that the *Type Definition* of a specific make and model of *Advanced Ultra-Light Aeroplane* is in compliance with design standards published in TP 10141. The *Manufacturer* must also certify that the *Type Definition* is available for inspection or retention upon request by the Minister or by the *Ultra-Light Aeroplane Central Technical Committee*.

### Manufacturing Standards

*Manufacturers* will ensure that their final product conforms to the *Type Definition* by quality assurance procedures.

Manufactured or Kit-Built. *Advanced Ultra-Light Aeroplanes* that are fully assembled and test-flown by the *Manufacturer* are considered to be "manufactured". *AULA's* that are other than "manufactured" are considered to be "kit-built" and will be subject to an initial operating restriction

*Note: "Manufactured" AULA's may be partially disassembled for shipment.*

### Manufacturer's Fitness Inspection

*Advanced Ultra-Light Aeroplanes* that are subject to a change in ownership, or ultra-light aeroplane that are upgrading to *Advanced Ultra-Light Aeroplane* status, must undergo a *Manufacturer's Fitness Inspection* prior to registration.

The *Manufacturer's Fitness Inspection* is an inspection which has been designed by the *Manufacturer* of a particular make and model of *AULA* and which when completed, will offer a comparable level of safety to an *AULA* assembled in accordance with the assembly instructions. (The reason that this inspection is necessary is because a fully assembled aeroplane cannot be evaluated completely enough for a person to declare conformity.)

A sample inspection is provided as Appendix C. Though not exclusive, the sample may be of assistance to *Manufacturers* in preparing an inspection particular to their specific make and model *advanced ultra-light aeroplane*.

## Maintenance Program and Records

*Manufacturers* will supply, with each *Advanced Ultra-Light Aeroplane* sold, a recommended maintenance program specifying the inspection schedule and maintenance procedures required for continuing serviceability.

Documentary evidence that the *Advanced Ultra-Light Aeroplane* has been maintained in accordance with the *Manufacturer's* maintenance program shall be maintained and made available to Transport Canada or an *Industry Representative* upon request. Maintenance records shall also include details on *Mandatory Action* notifications and *Modifications*, and include a copy of all *Manufacturer's Fitness Inspection* reports.

## Mandatory Action

*Manufacturers* must support their products by notifying registered owners of the corrective measures for all potentially unsafe conditions resulting from the operation of their products. This notification will be in the form of a *Mandatory Action*.

*Advanced Ultra-Light Aeroplane* owners will complete *Mandatory Actions* in the manner and the time frame prescribed by the *Manufacturer*.

Activity undertaken in response to a *Mandatory Action* shall be described in the *Advanced Ultra-Light Aeroplane* maintenance records.

*Note: Disputes over the validity of any Mandatory Action will be resolved by the Ultra-light Aeroplane Central Technical Committee.*

## Industry Representatives

*Manufacturers* and the *Ultra-Light Aeroplane Central Technical Committee* will nominate qualified *Industry Representatives* whose background, reputation and knowledge qualify them to assess:

- a. the quality of assembly of an *AULA* measured against the *Manufacturer's* assembly instructions or *Fitness Inspection*,
- b. the completeness of a specific *Mandatory Action* as well as the status of all *Mandatory Actions* issued to a particular *AULA* make and model,
- c. the likelihood that a change or addition to an *AULA* will constitute a *Modification* requiring the *Manufacturer's* approval, and
- d. the status and quality of maintenance and continuing serviceability.

*Note: Where a Manufacturer is unavailable, unable or unwilling to approve a Modification an Industry Representative may apply to the Ultra-Light Aeroplane Central Technical Committee for the authority to approve Modifications for a specific make and model of Advanced Ultra-Light Aeroplane.*

While the AULA owner is responsible for the above items, the Industry Representative provides a valuable source of knowledge and experience upon which the AULA owner can draw.

#### **Statement of Conformity (SoC)**

*Manufacturers of aeroplanes for which a Declaration of Compliance has been made, shall issue a Statement of Conformity (Appendix B) to:*

- (a) each new *Advanced Ultra-Light Aeroplane* that is sold;
- (b) owners of qualifying aeroplanes that were produced prior to this policy coming into force, and
- (c) owners of *Advanced Ultra-Light Aeroplanes* that are subject to a change in ownership.

*Note: A copy of the Manufacturer's Fitness Inspection shall be provided to the owner in the circumstance of (b) and (c) above.*

A copy of the *Statement of Conformity* must accompany the application for registration.

The *Statement of Conformity* must be carried onboard an *Advanced Ultra-Light Aeroplane* at all times during flight time.

The Manufacturer shall certify on the *Statement of Conformity* that the AULA, when assembled in accordance with the assembly instructions, will conform to the aeroplane *Type Definition*.

When assembly is completed on a new *Advanced Ultra-Light Aeroplane*, the registered owner shall attest that the aeroplane has been assembled in accordance with assembly instructions provided by the Manufacturer, that the AULA has not been modified without written permission from the Manufacturer, and that all applicable *Mandatory Actions* have been completed. (The Manufacturer will sign if he assembled the AULA.)

If the aeroplane was registered previously as an ultra-light aeroplane, or if it is an AULA that is subject to a change of ownership, the person re-registering the aeroplane as an AULA shall certify that the *Manufacturer's Fitness Inspection* has been conducted, that the AULA has not been modified without approval and that all *Mandatory Actions* have been completed.

*Note: If unsure as to the status of the AULA, the registered owner should have the aeroplane evaluated by the Manufacturer or an Industry Representative.*

*Note: Where the AULA is subject to a change of ownership, the previous owner's SoC is valid for a period of 60 days when signed by both the previous and new owner. This is the same period as the Interim Registration and provides time for the new owner to contact the Manufacturer and obtain a new (personalized) SoC prior to submitting documentation for the change of registration. This permits continued operation of the aeroplane during a 60 day period and should be sufficient time for the administrative process to take place.*

The Statement of Conformity will remain valid provided:

- (a) the Advanced Ultra-Light Aeroplane is maintained in accordance with the Manufacturer's maintenance program;
- (b) all applicable Mandatory Actions are completed within the required time frame;
- (c) no Modification is made to the aeroplane without written permission from the Manufacturer; and
- (d) records of continuing maintenance, Mandatory Actions, Modifications, and Manufacturer's Fitness Inspection reports are maintained and made available to the Minister or an Industry Representative upon request.

#### **Flight Authority**

*Advanced Ultra-Light Aeroplanes* will operate under the authority of the Certificate of Registration (C of R). The C of R is issued on the basis of the aeroplane meeting design standards published in TP 10141, *Design Standards For Advanced Ultra-Light Aeroplanes*, as determined by a Statement of Conformity, thus, when the SoC becomes invalid for any reason, the C of R will be cancelled.

*Advanced Ultra-Light Aeroplanes* operating under the authority of the subject Exemption shall display the following placard in a position where it can readily be seen by persons entering the aeroplane:

"Notice: This aeroplane is operating without a Certificate of Airworthiness.  
Avis: Cet avion vole sans Certificat de Navigabilité."

*Amateur-Built Ultra-Light Aeroplanes* will continue to operate under the authority of a Special Certificate of Airworthiness issued according to Chapter 507 of the *Airworthiness Manual*.

#### **Registration**

*New Advanced Ultra-Light Aeroplanes.* Application for registration of a new *Advanced Ultra-Light Aeroplane* shall be made when the *Statement of Conformity* has been signed by the *Manufacturer* and the *AULA* owner.

- (c) a copy of the previous owner's *Statement of Conformity* with the change of ownership declarations signed, and
- (d) an application for registration of an ultra-light aeroplane (this is on the reverse of the Certificate of Registration).

*Note: The new owner will have to contact the Manufacturer and obtain a new Statement of Conformity. The AULA may continue to be operated, for a period of 60 days, on the Interim Registration and the previous owner's Statement of Conformity.*

### Amateur-Built Ultra-Light Aeroplane

Registration will be in accordance with regulations pertaining to amateur-built aeroplanes.

### Registration Cancellation

The registration of *Advanced Ultra-Light Aeroplanes* will be cancelled when the *Statement of Conformity* becomes invalid.

### Registration Marks

*Advanced Ultra-Light Aeroplanes* will be issued registration marks in the C-Fxxx or C-Gxxx series. This will permit a clear distinction between the ultra-light aeroplane and the *Advanced Ultra-Light Aeroplane*. Where the aeroplane was registered previously as an ultra-light aeroplane (C-Ixxx marks), authority for a change of marks is an Exemption to Section 6 of Air Regulations, Series II, No. 2 (Appendix E).

### Advanced Ultra-Light Aeroplane Operating Standards

#### Initial Operating Restriction (IOR) - Kit-Built Advanced Ultra-Light Aeroplanes

Where any percentage of assembly of an *Advanced Ultra-Light Aeroplane* is done by other than the *Manufacturer* (i.e., kit-built), an initial operating restriction will be imposed.

The Initial Operating Restriction will be considered withdrawn when the aeroplane has operated for a period of 5 hours during which time the aeroplane required only the maintenance, repair and inspection associated with normal aeroplane operations.

Operation during the Initial Operating Restriction period is restricted to the following:

- (a) carriage of passengers is prohibited, and



- (h) the aeroplane shall not be flown over any built-up area or open air assembly of people.

### **Operations**

Subject to the Initial Operating Restriction, *Advanced Ultra-Light Aeroplanes* may be used for recreational purposes, including the carriage of a passenger when operated by the holder of a Private Pilot Licence - Aeroplane (PPL-A) or higher, flying training, and rental.

*Amateur-Built Ultra-Light Aeroplanes* may be used for recreational purposes only. When operated by the holder of an ultra-light aeroplane pilot licence (PPL-UL or CPL-UL), passenger carriage and operation in controlled airspace is not permissible, and operation within 5 nm of an airport shall be in accordance with sections 6 and 7 of Air Navigation Order, Series V, No. 24.

Operation of an ultra-light aeroplane, *Advanced Ultra-Light Aeroplane*, or *Amateur-Built Ultra-Light Aeroplane*, with another PPL-UL or higher rated pilot onboard will be permitted provided both pilots are in possession of their respective pilot licences.

### **Airspace**

For holders of a PPL-A (private pilot licence) or higher, operation of an *Advanced Ultra-Light Aeroplane* within 5 nautical miles from the centre of any airport or in controlled airspace will be permitted provided the aeroplane flight instrument and equipment requirements published in the Air Navigation Orders (ANOs) are complied with. Holders of an ultra-light aeroplane pilot licence (PPL-UL or CPL-UL) shall comply with the requirements of ANO V, No. 24.

When seeking authority to enter the control zone associated with a controlled airport by radio, pilots holding a PPL-UL or CPL-UL shall inform the controller that the aeroplane is being operated by the holder of an ultra-light pilot licence.

### **Summary**

The successful implementation of this interim UL policy will directly affect the content of legislation currently being prepared. The experience gained through this process will assist in determining the viability of the stated self-regulating philosophy; therefore, participants in this program are strongly encouraged to embrace this new concept and work with others to do the same.

Advanced Ultra-Light Aeroplane Interim Policy

Exemption To Paragraph 210(1)(a) Of The Air Regulations

Pursuant to Subsection 5.9(2) of the Aeronautics Act, I hereby authorize aeroplanes for which the manufacturer has declared to the Minister that the aeroplane type definition is in compliance with TP 10141, *Design Standards For Advanced Ultra Light Aeroplanes*, to be operated without complying with the requirement to hold a Certificate of Airworthiness as required by paragraph 210(1)(a) of the Air Regulations, subject to the following conditions:

- (a) the aeroplane shall be operated in accordance with all Air Regulations and Air Navigation Orders relating to ultra-light aeroplanes, except for the provisions contained in ANO V, No. 24, section 3, respecting the carriage of passengers, section 6, respecting operation in controlled airspace or within 5 nautical miles of any airport, and section 9, respecting the wearing of helmets;
- (b) the aeroplane may be used for flying training and rental but shall not be used for other commercial purposes;
- (c) the aeroplane shall be operated only by persons holding appropriate licences issued or validated by the Minister of Transport;
- (d) operation in controlled airspace and carriage of passengers other than for flying training is permissible for holders of a Private Pilot Licence-Aeroplane or higher with the appropriate class rating (single engine/land/sea);
- (e) operation of the aeroplane with another person onboard is permissible if that person is the holder of a Private Pilot Licence-Ultra-Light Aeroplane or higher; *(ANY LICENCE)*;
- (f) approval from a foreign Aviation Authority is required prior to flight over its territory;
- (g) the aeroplane shall be maintained in accordance with the manufacturer's maintenance program and maintenance records shall be kept to substantiate this;
- (h) all Mandatory Actions shall be completed in the manner and time frame prescribed by the manufacturer;
- (i) the aeroplane shall not be modified without written permission from the manufacturer; and
- (j) a Statement of Conformity shall be issued in respect of the aeroplane and carried onboard the aeroplane during flight time.

This Exemption continues in effect until the earliest of:

- (a) the date on which any condition specified in the Exemption is not complied with;
- (b) the date on which regulations pertaining to Advanced Ultra-Light Aeroplanes are promulgated; or
- (c) the date on which this Exemption is cancelled in writing by the Minister of Transport.

Dated at Ottawa \_\_\_\_\_, 1991.

Original signed by

D. Spruston  
Director General  
Aviation Regulation

## STATEMENT OF CONFORMITY

Manufacturer: \_\_\_\_\_ Makes: \_\_\_\_\_  
Address: \_\_\_\_\_ Model: \_\_\_\_\_  
\_\_\_\_\_ Serial #: \_\_\_\_\_

### Manufacturer's Statement:

*"The Advanced Ultra-Light Aeroplane described herein, when assembled in accordance with the assembly instructions, conforms to the Type Definition which complies with TP 10147, Design Standards For Advanced Ultra-Light Aeroplanes."*

\_\_\_\_\_  
Manufacturer (signature)

\_\_\_\_\_  
Date

### Registered Owner:

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Owner's Statement:

*"I certify that the aeroplane referred to herein has been assembled in accordance with the manufacturer's assembly instructions (or if applicable, has been inspected in accordance with the Manufacturer's Fitness Inspection), has not been modified without the manufacturer's written permission, and that all Mandatory Actions have been completed."*

\_\_\_\_\_  
Registered Owner (signature)

\_\_\_\_\_  
Date

### Change of Ownership

*"I certify that the aeroplane referred to herein has been maintained in accordance with the manufacturer's maintenance schedule, that all Mandatory Actions have been completed, and that no modifications have been made to the aeroplane without written approval from the manufacturer."*

\_\_\_\_\_  
Previous Owner

\_\_\_\_\_  
Date

*"I certify that the aeroplane described herein has been inspected in accordance with the Manufacturer's Fitness Inspection."*

\_\_\_\_\_  
New Owner

\_\_\_\_\_  
Date

This document shall be carried onboard the aeroplane during flight.

# MANUFACTURER'S FITNESS INSPECTION REPORT (SAMPLE)

Owner: \_\_\_\_\_ Registration: \_\_\_\_\_

Address: \_\_\_\_\_ Manufacturer: \_\_\_\_\_

\_\_\_\_\_ Model: \_\_\_\_\_

\_\_\_\_\_ Serial #: \_\_\_\_\_

## Reference material:

- (a) Manufacturer's Assembly Manual
- (b) Design Standards For Advanced Ultra-Light Aeroplanes (TP 10141)
- (c) FAA AC 43.13 Acceptable Methods and Practices
- (d) Air Navigation Orders/Air Regulations

## GENERAL 1.0

	Sat/Unsat
1.1 Aircraft Identification plate installed . . . . .	___/___
1.2 Aircraft registration marks acceptable . . . . .	___/___
1.3 Statement of Conformity available and signed by the manufacturer and owner . . . . .	___/___
1.4 Maintenance record complete and current . . . . .	___/___
1.5 Weight and balance complete/acceptable . . . . .	___/___
1.6 Mandatory Modifications Complied with . . . . .	___/___
1.7 Float Installation and Condition . . . . .	___/___
1.8 Ballistic Parachute installation and serviceability . . . . .	___/___

## FUSELAGE 2.0

2.1 General Exterior Condition . . . . .	___/___
2.2 Inspect Bulkheads, Gussels & Stringers for Damage . . . . .	___/___
2.3 Inspect Fuselage Skin Surface for Signs of Damage & Distortion. Inspect fabric condition if applicable . . . . .	___/___
2.4 Inspect all fasteners for security . . . . .	___/___
2.5 Inspect Windows and Canopy for condition & Security . . . . .	___/___
2.6 Inspect Firewall (fore & aft) for condition, chaffing lines control cables & distortion . . . . .	___/___
2.7 Placards are installed as applicable . . . . .	___/___
2.8 Inspect flight controls for operation and security . . . . .	___/___
2.9 Inspect all cables and pulleys for condition, attachment, damage, corrosion, tension & operation . . . . .	___/___
2.10 Inspect seats, seatbelts/shoulder harness for security, condition and attachment . . . . .	___/___

- |     |   |                           |
|-----|---|---------------------------|
| 3.1 | Inspect engine cowling for condition and security . . . . .                             | <u>    </u> / <u>    </u> |
| 3.2 | Inspect all engine controls for condition, operation and security . . . . .             | <u>    </u> / <u>    </u> |
| 3.3 | Check all fuel system components for condition, leaks, security and operation . . . . . | <u>    </u> / <u>    </u> |
| 3.4 | Check exhaust system for attachment and condition . . . . .                             | <u>    </u> / <u>    </u> |
| 3.5 | Inspect ignition system components for condition and operation . . . . .                | <u>    </u> / <u>    </u> |
| 3.6 | Inspect engine mounts and attachment condition . . . . .                                | <u>    </u> / <u>    </u> |
| 3.7 | Inspect reduction drive for condition & operation . . . . .                             | <u>    </u> / <u>    </u> |
| 3.8 | Cooling & lubrication system for condition and operation . . . . .                      | <u>    </u> / <u>    </u> |

#### FUEL SYSTEM 4.0

- |     |  |                           |
|-----|--|---------------------------|
| 4.1 | Fuel lines for condition, attachment, chaffing . . . . . | <u>    </u> / <u>    </u> |
| 4.2 | Signs of contamination in the system . . . . .           | <u>    </u> / <u>    </u> |
| 4.3 | Fuel caps for security/condition . . . . .               | <u>    </u> / <u>    </u> |
| 4.4 | Inspect fuel tank vent system . . . . .                  | <u>    </u> / <u>    </u> |
| 4.5 | Fuel system valves for condition . . . . .               | <u>    </u> / <u>    </u> |
| 4.6 | Inspect fuel system gasolator/filter . . . . .           | <u>    </u> / <u>    </u> |

#### PROPELLER 5.0

- |     |  |                           |
|-----|--|---------------------------|
| 5.1 | Propeller installed is type specified . . . . .  | <u>    </u> / <u>    </u> |
| 5.2 | Inspect for cracks, signs of delamination, damage corrosion, leading edge protection condition . . . . . | <u>    </u> / <u>    </u> |
| 5.3 | Check propeller mount bolts condition, torques and security . . . . .                                    | <u>    </u> / <u>    </u> |
| 5.4 | Check propeller tracking . . . . .   | <u>    </u> / <u>    </u> |
| 5.5 | Propeller spinner conditions . . . . .   | <u>    </u> / <u>    </u> |

#### EMPENNAGE 6.0

- |     |   |                           |
|-----|---|---------------------------|
| 6.1 | Inspect all attach points & supports for security . . . . .   | <u>    </u> / <u>    </u> |
| 6.2 | Inspect all hinge points and flight controls for condition, operation & security . . . . .                  | <u>    </u> / <u>    </u> |
| 6.3 | Check all control stops . . . . .   | <u>    </u> / <u>    </u> |
| 6.4 | Inspect all control cables, pulleys, push pull rods, rod end bearings for condition and operation . . . . . | <u>    </u> / <u>    </u> |
| 6.5 | Inspect all skin surfaces for condition & damage . . . . .  | <u>    </u> / <u>    </u> |

- |     |  |         |
|-----|--|---------|
| 7.1 | Inspect all attach points & supports for security . . . . .  | ___/___ |
| 7.2 | Inspect all hinge points and flight controls for condition,<br>operation and security . . . . .                | ___/___ |
| 7.3 | Check all control stops . . . . .  | ___/___ |
| 7.4 | Inspect all control cables, pulleys, push pull rods, rod<br>end bearings for condition and operation . . . . . | ___/___ |
| 7.5 | Inspect all skin surfaces for condition & damage . . . . .   | ___/___ |
| 7.6 | Wing attach points for condition & security . . . . .  | ___/___ |
| 7.7 | Flying wires/landing wires/struts for security, condition,<br>damage . . . . .                                 | ___/___ |
| 7.8 | Inspect wing structure for deformation & damage . . . . .  | ___/___ |

### ELECTRICAL

- |     |  |         |
|-----|--|---------|
| 8.1 | General condition/circuit protection & operation . . . . .   | ___/___ |
| 8.2 | Inspect all antenna mounts and wiring for security . . . . .                                       | ___/___ |
| 8.3 | Check all grounding wires/straps . . . . .   | ___/___ |
| 8.4 | Inspect radios & light systems for security & operation . . . . .                                  | ___/___ |
| 8.5 | Inspect Battery for security and corrosion . . . . .   | ___/___ |
| 8.6 | Inspect wires and electrical connections for damage,<br>corrosion, chaffing and security . . . . . | ___/___ |

### OPERATIONAL INSPECTION 9.0

- |     |  |         |
|-----|--|---------|
| 9.1 | Visual inspection of engine, propeller & reduction drive<br>system . . . . . | ___/___ |
| 9.2 | Inspect all panels and fairings for security . . . . .                       | ___/___ |
| 9.3 | Break system operation and condition . . . . .                               | ___/___ |
| 9.4 | Engine starter operation & procedures . . . . .                              | ___/___ |
| 9.5 | All engine & flight instruments for operation . . . . .                      | ___/___ |
| 9.6 | Ignition operation/mag check . . . . .                                       | ___/___ |
| 9.7 | Static and idle RPM check . . . . .  | ___/___ |
| 9.8 | Inspect all systems for leaks & condition . . . . .                          | ___/___ |

### FITNESS INSPECTION CERTIFICATION

I certify that the aeroplane referred to herein has been inspected and meets the applicable requirements. This aircraft has been assembled/maintained to acceptable standard aircraft methods, practices and techniques.

\_\_\_\_\_  
Registered Owner (signature)

\_\_\_\_\_  
Date

## Advanced Ultra-Light Aeroplanes

### Exemption to Section 400 of the Air Regulations

Pursuant to subsection 5.9(2) of the Air Regulations, I hereby exempt operators of amateur-built aeroplanes that meet the weight and stall speed criteria for *Advanced Ultra-Light Aeroplanes*, published in TP 10141, Design Standards For Advanced Ultra-Light Aeroplanes, from the requirement to hold an appropriate personnel license or permit as required by section 400 of the Air Regulations, subject to the following conditions:

- (a) the person flying the aeroplane shall be the holder of a Private Pilot License or Commercial Pilot License, Ultra-Light Aeroplane category;
- (b) the aeroplane shall not be used for any commercial purpose;
- (c) operation in controlled airspace is prohibited subject to the provisions in sections 6 and 7 of Air Navigation Order, Series V, No. 24; and
- (d) the carriage of another person is prohibited unless the other person is the holder of a pilot licence issued by the Minister and is carrying the license on his or her person.

This Exemption continues in effect until the earliest of:

- (a) the date on which any condition specified in the Authorization is not complied with;
- (b) the date on which regulations pertaining to Advanced Ultra-Light Aeroplanes are promulgated; or
- (c) the date on which this Authorization is cancelled in writing by the Minister of Transport.

Dated at Ottawa \_\_\_\_\_, 1991.

Original signed by

D. Spruston  
Director General  
Aviation Regulation

Advanced Ultra-Light Aeroplane

Exemption To Section 6 Of Air Regulations, Series II, No. 2

Pursuant to subsection 5.9(2) of the Aeronautics Act, authorization is hereby granted to change the nationality and registration marks on an aeroplane, contrary to the provisions of Section 6 of the Air Regulations, Series II, No. 2, subject to the following conditions:

- (a) a Declaration of Compliance, as defined in the Ultra-Light Aeroplane Policy, has been received from the manufacturer of the specific make and model of aeroplane, attesting that the aeroplane type definition is in compliance with design standards published in TP 10141, Design Standards For Advanced Ultra-Light Aeroplanes; and
- (b) a Statement of Conformity, as defined in the Ultra-Light Aeroplane Policy dated September 10, 1991, has been submitted with the application for registration, and has been appropriately signed by the manufacturer and the aeroplane owner.

This Exemption continues in effect until the earliest of:

- (a) the date on which any condition specified in the Authorization is not complied with;
- (b) the date on which regulations pertaining to Advanced Ultra-Light Aeroplanes are promulgated; or
- (c) the date on which this Authorization is cancelled in writing by the Minister of Transport.

Dated at Ottawa \_\_\_\_\_, 1991.

Original signed by

D. Spruston  
Director General  
Aviation Regulation



AIR NAVIGATION ORDER, SERIES V, NO. 24  
ORDER RESPECTING HANG GLIDER AND ULTRA-LIGHT  
AEROPLANE OPERATIONS IN CANADIAN AIRSPACE

Short Title

1. This Order may be cited as the Hang Glider and Ultra-Light Aeroplane Operations Order.

Application

2. This Order applies to the operation of every hang glider and ultra-light aeroplane in Canadian airspace.

Operations

3. No person shall carry a passenger in a hang glider or an ultra-light aeroplane except for the purpose of providing dual flying instruction to that person.

4. No person shall operate a hang glider or an ultra-light aeroplane except in accordance with the Visual Flight Rules.

5. No person shall operate a hang glider or an ultra-light aeroplane at night.

6. Except as authorized pursuant to section 7, no person shall operate a hang glider or an ultra-light aeroplane

- (a) within five nautical miles from the centre of any airport; or
- (b) in controlled airspace.

7. A person may operate a hang glider or an ultra-light aeroplane
- (a) within five nautical miles from the centre of any airport or within any control zone associated with an airport, other than a controlled airport, if that person has obtained prior permission from the airport operator; and
  - (b) within any control zone associated with a controlled airport if that person has obtained an air traffic control clearance, as defined in section 101 of the Air Regulations, by two-way radio voice communications from the airport control tower unit of that airport.

8. No person shall operate a hang glider or an ultra-light aeroplane unless each occupant is secured by a suitable restraining means attached to the primary structure of the hang glider or ultra-light aeroplane to prevent accidental egress from the aircraft.

9. No person shall operate a hang glider or an ultra-light aeroplane unless each occupant is wearing a protective helmet.