



Transport Canada
Civil Aviation

Transports Canada
Aviation civile

AIRCRAFT CERTIFICATION - CERTIFICATION DES AÉRONEFS
STAFF INSTRUCTION - DIRECTIVE VISANT LE PERSONNEL

| | |
|---|--|
| Subject - Objet AGRICULTURAL AEROPLANE OPERATIONS - EXEMPTION FROM PARAGRAPHS 605.03 (1) AND 602.07 (B) OF THE CANADIAN AVIATION REGULATIONS | Number - Numéro 26 |
| | Issue No. - Édition N° 1 |
| | Page 1 of 5 de |
| File No. - N° Du Dossier AARD 5009-3-26 | Date (Y-A- M-D-J) 1998-07-20 |

K.J. Mansfield
Director, Aircraft Certification



| | |
|---|--|
| Subject - Objet AGRICULTURAL AEROPLANE OPERATIONS - EXEMPTION FROM PARAGRAPHS 605.03 (1) AND 602.07 (B) OF THE CANADIAN AVIATION REGULATIONS | Number - Numéro 26 |
| | Issue No. - Édition N° 1 |
| | Page 2 of 5 de |
| File No. - N° Du Dossier AARD 5009-3-26 | Date (Y-A- M-D-J) 1998-07-20 |

TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| 1.0 INTRODUCTION | 3 |
| 2.0 PURPOSE | 3 |
| 3.0 APPLICABILITY | 3 |
| 4.0 AUTHORITY | 3 |
| 5.0 PROCEDURES | 4 |
| 6.0 DELEGATED AUTHORITY | 4 |
| 7.0 INSPECTION REQUIREMENTS | 5 |
| 8.0 AIRWORTHINESS NOTICE PUBLICATION | 5 |

APPENDIX "A"

EXEMPTION POLICY DOCUMENT CONCERNING THE EXEMPTION PROCESS REQUIREMENTS FROM THE *CANADIAN AVIATION REGULATIONS* (CARs) WITH REGARD TO AEROPLANES ENGAGED IN AGRICULTURAL OPERATIONS FOR THE AERIAL DISPERSION OF JETTISONABLE CARGO

APPENDIX "B"

**PRECEDENT EXEMPTION DOCUMENT ENTITLED:
"EXEMPTION FROM PARAGRAPHS 605.03(1) AND 602.07(b) OF THE *CANADIAN AVIATION REGULATIONS*"**



| | |
|---|--|
| Subject - Objet AGRICULTURAL AEROPLANE OPERATIONS - EXEMPTION FROM PARAGRAPHS 605.03 (1) AND 602.07 (B) OF THE CANADIAN AVIATION REGULATIONS | Number - Numéro 26 |
| | Issue No. - Édition N° 1 |
| | Page 3 of 5 de |
| File No. - N° Du Dossier AARD 5009-3-26 | Date (Y-A- M-D-J) 1998-07-20 |

1.0 INTRODUCTION

The operation of aeroplanes engaged in special purpose agricultural operations for the aerial dispersion of jettisonable cargo has been reviewed. It has been determined that such operations may be permitted at gross weights exceeding the limits specified in the applicable type certificate data sheets, provided that certain terms and conditions are met.

2.0 PURPOSE

The purpose of this ACSI is to inform the Airworthiness personnel of:

- a) the scope of the National Exemption Policy approved by the Director General, Civil Aviation;
- b) the application procedures associated with the submission of requests for an exemption; and
- c) the requirement for the Regions to evaluate exemption requests.

3.0 APPLICABILITY

The exemption policy applies only to aeroplanes approved for agricultural operations which:

- a) have a normal take-off weight limit of 12,500 lbs. or less; and
- b) have a cargo jettison system capability permitting the pilot to jettison 80 percent (80%) of the disposable load in six (6) seconds or less.

4.0 AUTHORITY

Subsection 5.9(2) of the *Aeronautics Act* allows the Minister to exempt any person from complying with the application of regulations subject to prescribed conditions, if it is in the public interest and is not likely to affect aviation safety. The Exemption Policy Document provides operators of agricultural aeroplanes with criteria to be considered when requesting an exemption from complying with take-off weight limitations governed by paragraphs 605.03(1) and 602.07(b) of the *Canadian Aviation Regulations*.



| | |
|---|--|
| Subject - Objet AGRICULTURAL AEROPLANE OPERATIONS - EXEMPTION FROM PARAGRAPHS 605.03 (1) AND 602.07 (B) OF THE CANADIAN AVIATION REGULATIONS | Number - Numéro 26 |
| | Issue No. - Édition N° 1 |
| | Page 4 of 5 de |
| File No. - N° Du Dossier AARD 5009-3-26 | Date (Y-A- M-D-J) 1998-07-20 |

5.0 PROCEDURES

- a) Regions are to reproduce the request for exemption form included in the Exemption Policy Document package which is applied to this ACSI, and make it available to the public upon request.
- b) The operator is to establish the proposed take-off weight limits through the conduct of a flight evaluation of his aeroplane type.
- c) The issue of a Flight Permit-Specific Purpose is required for the flight evaluation.
- d) The applicant may consult Flight Test division to obtain advice with respect to the flight evaluation.
- e) The results of the flight evaluation are to form the basis for the Operating Manual Supplement.
- f) The Operating Manual Supplement will not be approved by TCCA.
- g) The Regions are to ensure that the conditions of the exemption are satisfied.
- h) Copies of the request for exemption form, Operating Manual Supplement, and the exemption once granted are to be retained on the 5008 aeroplane file for record purposes.

NOTE:

The exemption is to be attached to the Special Certificate of Airworthiness.

6.0 DELEGATED AUTHORITY

In accordance with Schedule A-5 of the Ministerial Delegation Document, Regional Directors, Civil Aviation hold the authority to grant such exemptions.



| | |
|---|--|
| Subject - Objet AGRICULTURAL AEROPLANE OPERATIONS - EXEMPTION FROM PARAGRAPHS 605.03 (1) AND 602.07 (B) OF THE CANADIAN AVIATION REGULATIONS | Number - Numéro 26 |
| | Issue No. - Édition N° 1 |
| | Page 5 of 5 de |
| File No. - N° Du Dossier AARD 5009-3-26 | Date (Y-A- M-D-J) 1998-07-20 |

7.0 INSPECTION REQUIREMENTS

The aircraft are to be maintained in accordance with the requirements of subsection 605.86 of the *Canadian Aviation Regulations*. The Maintenance Schedule required by this provision must also include a special structural inspection of the airframe to take into account the effect of the overweight operation on life limited structural elements. In addition, the following inspection requirements must form part of the supplemental inspection program:

- a) At the end of each day of operation, the aircraft must be cleaned of any corrosive chemical dispersed during the operation.
- b) At every 100 hours of spray operation, or at intervals not to exceed 30 days, the aircraft structure is to be inspected to detect any corrosion defects and structural damage, with surface corrosion protection and structural repairs applied as per approved methods. Any structural damage is to be reported to the responsible regional office for monitoring purposes as soon as possible or, at the latest, within three working days.
- c) Prior to the beginning of each spraying season, or at intervals of not more than 12 calendar months, the complete airframe structure, flight controls and their attachments, and landing gear must be inspected for corrosion, structural integrity and proper functioning. Defects discovered are to be rectified using approved methods.
- d) The inspection results found in item (c) above must be rectified before the aircraft is transferred to any other operation role, i.e. fire suppression, etc.

8.0 AIRWORTHINESS NOTICE PUBLICATION

Airworthiness Notice B012 informs the industry of the availability of this exemption option. Copies of the Exemption Policy Document concerning the exemption process requirements for Special Purpose Agricultural Operations for the Aerial Dispersion of Jettisonable Cargo, attached to this ACSI, is to be made available to the public upon request.

**EXEMPTION POLICY DOCUMENT CONCERNING THE EXEMPTION PROCESS
REQUIREMENTS FROM THE *CANADIAN AVIATION REGULATIONS* (CARs) WITH
REGARD TO AEROPLANES ENGAGED IN AGRICULTURAL OPERATIONS FOR THE
AERIAL DISPERSION OF JETTISONABLE CARGO**

TABLE OF CONTENTS

| | |
|------------------------------|--|
| APPENDIX “I”: | THE REQUIRED PROCESS WHEN MAKING AN EXEMPTION REQUEST FROM PARAGRAPHS 605.03(1) AND 602.07(b) OF THE <i>CANADIAN AVIATION REGULATIONS</i> |
| APPENDIX “II”: | REQUEST FOR EXEMPTION FROM THE REQUIREMENTS OF PARAGRAPHS 605.03(1)(b) AND 602.07(b) OF THE <i>CANADIAN AVIATION REGULATIONS</i> |
| APPENDIX “III”: | EVALUATION OF THE OVERWEIGHT AEROPLANE TO DETERMINE OPERATING LIMITATIONS IN THE AERIAL APPLICATION ROLE |
| <i>ATTACHEMENT I</i>: | OVERWEIGHT OPERATION OF AEROPLANES IN THE AERIAL APPLICATION ROLE |
| <i>ATTACHMENT II</i>: | OPERATING MANUAL SUPPLEMENT OVERWEIGHT OPERATIONS |

**THE REQUIRED PROCESS WHEN REQUESTING AN EXEMPTION
FROM PARAGRAPHS 605.03(1) AND 602.07(b) OF THE
CANADIAN AVIATION REGULATIONS**

The Aeroplane

Exemptions will only apply to aeroplanes with normal take-off weight of 12,500 lbs. or less which are equipped for the aerial dispersion of cargo in an agricultural role, and have a cargo jettison system which permits the operator to jettison at least 80 percent (80%) of the disposable load in six (6) seconds or less.

The Process

A request form for an exemption may be obtained from any Transport Canada Regional Office.

The guidelines for performing an evaluation of an aeroplane are provided by Transport Canada, and are attached to the request form.

Before an exemption request is considered, an operator will establish an increased take-off weight by evaluating a specific aeroplane type.

Since the evaluation requires that the aeroplane be operated at weights in excess of the maximum permissible weight contained in the Special Certificate of Airworthiness, a specific purpose flight permit is required for the flight evaluation.

The evaluation guidelines provide information on the suggested maximum take-off weight for airframe structural considerations, and methods for determining the flight characteristics. A pilot conducting an evaluation may obtain additional guidance by contacting Transport Canada, Civil Aviation, Flight Test Division at (613) 952-4315 or 952-4318.

The results of the evaluation are entered into an Operating Manual Supplement, together with the declaration by the pilot making the evaluation that the aeroplane is suited for overweight operations.

A copy of the Operating Manual Supplement, together with the completed exemption request form is required before an exemption request can be considered.

The Exemption

When an exemption is granted, it applies to the operation of a specific aeroplane. That aeroplane can be operated within the limits contained in the “Operating Manual Supplement - Overweight Operations” which is NOT approved by Transport Canada. A number of operating restrictions apply when an exemption is granted, and these form the terms and conditions of the exemption. Ferry flights to reposition the aeroplane may be conducted in accordance with the limitations contained in the aeroplane basic flight manual. The conditions of the exemption apply to ALL other operations of the aeroplane.

To transfer the aeroplane for which an exemption has been issued to another operating role, a special airframe inspection program is required and all detected defects must be first be rectified before the transfer can take place.

**REQUEST FOR EXEMPTION FROM THE REQUIREMENTS OF
PARAGRAPHS 605.03(1)(b) AND 602.07(b) OF THE
CANADIAN AVIATION REGULATIONS**

An exemption is requested from the requirements of paragraphs 605.03(1)(b) and 602.07(b) of the *Canadian Aviation Regulations* pursuant to subsection 5.9(2) of the *Aeronautics Act*. The purpose of this exemption is to allow air operators to engage in special purpose agricultural operations for the aerial dispersion of jettisonable cargo. This exemption is to apply to the air operators for the aeroplanes listed herein.

A representative aeroplane of each make and model for which this exemption is requested has been subject to an evaluation of the overweight aeroplane to determine its operating limitations in the aerial application role, the results of which will become a condition of the exemption. See Attachment "A".

Copies of the Operating Manual Supplement containing the operating limitations for the aircraft at increased take-off weight as determined by the evaluation of the aeroplane are attached hereto, and form part of this request. See Appendix "II".

AIRCRAFT INFORMATION

Owner/Company Name:

Address:

Manufacturer:

Model:

Engine Model:

Registration Model:

Type Approval/Certificate:

Maximum Permissible Take-off Weight recorded on the
Special Certificate of Airworthiness:

I certify that the aircraft listed on this request for exemption are equipped with a system which permits the operator to jettison at least 80 percent (80%) of the disposable load in six

(6) seconds or less, and that the information contained in the Operating Manual Supplement or placards, or both is an accurate representation of the results of the evaluation conducted on each aircraft type in accordance with the criteria set out in Attachment “A” to this request.

I also acknowledge that if this exemption is granted with respect to the special purpose agricultural operations for aerial dispersion of jettisonable cargo for the aeroplanes listed herein, such aeroplanes are not eligible for transfer to another operating role without first rectification of defects incurred during operation under this exemption, and identified during the special inspection program approved by the Minister for this purpose.

Owner/Company/Representative _____

registered owner as shown
on the registration certificate

authorized representative

Date _____

**EVALUATION OF THE OVERWEIGHT AEROPLANE
TO DETERMINE OPERATING LIMITATIONS
IN THE AERIAL APPLICATION ROLE**

1.0 APPLICABILITY

This evaluation applies to aeroplanes in special purpose agricultural operations for aerial dispersion of jettisonable cargo where an owner requests exemption from the requirement that the aircraft operate in accordance with the conditions set out in the flight authority under paragraph 605.03(1)(b) of the *Canadian Aviation Regulations*, and also requests exemption from operating the aircraft in accordance with the aircraft operating limitations under paragraph 602.07(b) of the *Canadian Aviation Regulations*.

2.0 RESPONSIBILITY

The owner/operator is responsible for the evaluation of the aeroplane. The pilot conducting the evaluation shall hold at least a commercial licence, aeroplane category or higher, and have a minimum of 25 hours pilot-in-command on the aircraft type.

3.0 OBJECTIVE

The purpose of the evaluation is to determine that the aeroplane is suitable for operations at the higher weights, and to ensure that the operator is aware of the aeroplane’s characteristics at these weights. As a result of the evaluation, the owner/operator shall:

- a) prepare an Operating Manual Supplement defining the overload operation;
See Appendix II;
- b) install the placards on the aircraft in accordance with the information contained in section 3 of Appendix II (Placards); and
- c) enter a declaration in the journey log book signed, and dated by the pilot conducting the evaluation attesting to the aeroplane’s suitability for operations at the higher weight. See Appendix II.

4.0 EVALUATION

- 4.1 General. The operational evaluation must be carried out with a hopper load consisting of water which may be safely jettisoned. Before flight, the jettison mechanism should be ground checked with the water load to ensure satisfactory operation. The flights should be conducted initially with the hopper at reduced capacity gradually increasing to the maximum operating weight anticipated. The maximum take-off weight should be the lesser of the weights determined under 4.2 and 4.3 below.
- 4.2 Structural Considerations. One of the following methods can be used to determine a suggested maximum take-off weight (MTOW) which will take into account airframe structural strength:
- 4.2.1 Aircraft With Normal or Restricted Category MTOW of 6000 lbs. or less. (Including aircraft with a previously approved weight increase of 20 percent (20%) in accordance with E&I Manual provisions.)

For aircraft designed for a maximum take-off weight of 6000 lbs. or less, an empirical formula is applied which, in conjunction with an appropriate speed limitation, will provide an upper limit to the wing structural loads.

In applying this formula, it is imperative that the value used for W_n does not exceed 6000 lbs., and the value used for V_a does not exceed 115 knots.

The suggested maximum take-off weight (W_o) is given by:

$$W_o = \frac{W_n \times V_a^2}{7800}$$

where: W_n = normal MTOW (maximum value 6000 lbs.)
 V_a = manoeuvring speed in knots (maximum value 115 knots)

Example:

For the Air Tractor 301: W_n = 5000 lbs.
 V_a = 121 kts (use 115 kts)

$$W_o = \frac{5000 (115)^2}{7800}$$

$$W_o = \underline{8478 \text{ lbs.}}$$

NOTE:

Appendix “I” contains suggested maximum take-off weights for specific aircraft types. While some of the weights in the Appendix have been derived from the application of the formula, others have been extracted from sources listed in the notes on the Appendix. It may be seen that the formula has been applied to aircraft with weights of 6,300 lbs. And

6,500 lbs. respectively, however, the value for W_n used in the calculation is 6000 lbs.

Extreme caution should be used for any operation at weights in excess of the suggested values.

4.2.2 Aircraft with Normal Category MTOW Greater than 6000 lbs., but not more than 12,000 lbs.

For aircraft with a MTOW greater than 6000 lbs., the original structural design load factor may have a value that is lower than the value applicable to the lighter aircraft, and for that reason the empirical formula cannot be used.

The proposed maximum take-off weight should not exceed:

- a) 1.25 times the maximum take-off weight in the normal category; or
- b) a maximum take-off weight determined by the aircraft manufacturer’s analysis to be structurally acceptable.

4.3 Flight Characteristics. The flight evaluation should include the aspects noted below, plus manoeuvres simulating the intended operation of the aircraft. All evaluation flights must be conducted at a safe altitude over open terrain. In flight, it should be possible to trim the aircraft for steady, level flight. Any undue tendency to stall or to dive (instability), or to roll is considered unsatisfactory. At the completion of the flight, the hopper load should be jettisoned at the speed recommended by the manufacturer to confirm that at least 80 percent (80%) of the hopper load can be jettisoned in six (6) seconds or less, and additionally to reduce weight to the normal landing weight.

4.3.1 Take-off Speed. The speed at which a clean transition can be made from the take-off roll to the initial climb should be noted in the Operating Manual Supplement.

4.3.2 Minimum Operating Speed (V_{min}). The minimum operating speed should be determined as the minimum speed at which the aircraft is free of any stalling indication or tendency; that is, five percent (5%) above the speed at which there is any stall buffet, or any tendency to pitch nose down, or to roll that is not easily controllable. This speed should be determined at a safe altitude by slowly reducing speed from typical trimmed cruise condition with idle power set. The configurations checked may also include partial flap settings.

- 4.3.3 Maximum Level Flight Speed (V_h). The maximum speed the aircraft can attain in level flight should be determined using Maximum Continuous Power (MCP). This speed should not be less than 30 knots above the V_{min} speed determined in 4.3.2 above. If it is, the proposed gross weight should be reduced.
- 4.3.4 Manoeuvring Capability. Confirm that the aircraft can sustain a level turn at 1.2 times the V_{min} speed with 40 degree of bank, without any buffet, or other stall indications evident. If stall indications are evident, the proposed gross weight should be reduced.
- 4.3.5 Best Climb Speed. The best climb speed should be determined, and should be at least 10 knots greater than the minimum operating speed (V_{min}) noted above. A series of timed climbs (using the altimeter and a timepiece) should be flown at different airspeeds to determine the speed for best rate-of-climb. These climbs should be carried out through the same general altitude band, and the recommended climb power (not more than MCP) should be used. The effect of wind can be minimized by repeating each climb on a reciprocal heading, and averaging the rate of climb achieved at each speed.
- 4.3.6 Climb Verification. For the proposed gross weight (minus the fuel used for take-off and climb), the rate of climb at 5000 ft ASL (density altitude) should be demonstrated to be at least 100 fpm at the best climb speed. A statement of this climb capability should be included in the performance section of the Operating Manual Supplement.
- 4.3.7 Maximum Operating Speed (V_{max}). Throughout the evaluation above, and for operations at the proposed gross weight, the maximum operating speed should be limited to the approved design manoeuvring speed (V_a). This speed should be obtained from the existing Pilots Operating Handbook, placards, the Type Approval Data Sheet or , for some specific aircraft types, Appendix “I” to this document.

5.0 OPERATING MANUAL SUPPLEMENT

An Operating Manual Supplement addressing the overweight condition shall be prepared and made available to the pilot. See sample format in Appendix “II”.

**OVERWEIGHT OPERATIONAL LIMITATIONS OF AEROPLANES
IN THE AERIAL APPLICATION ROLE**

For the aircraft types listed below, it is suggested that the overweight take-off limitations (W_o) not exceed the value given in this table.

| | W_n (lbs) | V_a (Kts) | W_o (lbs) | |
|---|-------------------------------|-------------------------------|----------------------------------|---|
| Air Tractor 301 401 502 | 5,000 6,000 6,500 | 121 122 122 | 8,478 10,173 10,173 | |
| Ayres Corp. S2R-R1300 S2R-T34 S2R-R1820 | 6,000 6,000 6,000 | 109 109 109 | 8,800 9,120 9,120 | See Note 1. See Note 1. See Note 1. |
| Cessna A188B | 3,300 | 101 | 4,000/4,200 | See Note 2. |
| Piper PA-25-260 PA-36-285 PA-36-300 PA-36-375 | 2,900 - - - | 104 - - - | 4,020 4,400 4,400 4,800 | See Note 3. See Note 3. See Note 3. |
| Schweitzer G164A G164B G164C | 4,500 4,500/5,200 6,300 | 102 101 97 | 6,075 6,075/6,800 7,238 | See Note 4. See Note 5. |

Notes:

1. Maximum weights determined from manufacturer's engineering data.
2. For S/Ns 833-1374, maximum weight is 4,000 lbs.
For S/Ns 1375T and up, maximum weight is 4,200 lbs.
(Reference T.A.D.S. No. A-115)
3. In accordance with Note 3 of FAA T.C.D.S. A10So.
4. Maximum weight in accordance with T.A.D.S. A-91, which includes a 35 percent (35%) increase over FAA T.C.D.S. weight.
5. For S/Ns up to 708B, maximum weight is 6,075 lbs.
For S/Ns 709B and up, it is recommended that maximum weight not exceed 6,800 lbs.

(Company Name)

OPERATING MANUAL SUPPLEMENT

OVERWEIGHT OPERATIONAL LIMITATIONS

(Aircraft Type)

(Aircraft Registration)

The information contained in this Operating Manual Supplement expands upon and supersedes information contained in the basic aircraft operating manual. For items not addressed in this manual, refer back to the basic operating manual.

The content of this supplement has NOT been approved by TCCA.

(Aircraft Type) OPERATING MANUAL SUPPLEMENT
Overweight Operational Limitations

1.0 DESIGN LIMITATIONS

1.1 Weight Limits

The maximum takeoff weight is _____ lbs. (kg)

Maximum hopper loads are: a) _____
b) _____ etc

The maximum landing weight (unchanged) is _____ lbs (kg)

1.2 Center of Gravity Limits

The CG limits previously approved are not to be expanded for, or as a result of this evaluation.

Forward Limit:

Aft Limit :

1.3 Airspeed Limits

Maximum operating speed (Vmax): _____ mph/knots IAS

Minimum operating speed (Vmin): _____ mph/knots IAS Flap up
_____ mph/knots IAS Flap ____ degree

1.4 Other Operating Speeds

Recommended takeoff speed _____ mph/knots IAS

Recommended climb speed _____ mph/knots IAS

2.0 OPERATIONAL LIMITATIONS

- a) Operations are prohibited in or out of airports while commercial passenger operations are being conducted.
- b) No cargo is carried in flight other than the material being dispersed.
- c) Only those manoeuvres that are required in aerial application operations are permitted. Intentional spins, stalls, acrobatic or abrupt manoeuvres are prohibited.

- d) The pilot must ensure that there are adequate performance margins to contend with altitude, temperature and terrain conditions.
- e) Once the exemption is in effect and this aircraft is operating under its terms and conditions, this aircraft shall not be transferred to any other role category, or used for any other purpose than aerial application, unless a structural inspection is conducted, and written authorization from the Minister.
- f) Ferry flights to reposition the aircraft may be conducted, and such flights shall be made in accordance with the limitations contained in the basic aircraft flight manual (or Aircraft Type Approval).

3.0 PLACARDS

The following placards must be in place on the aircraft:

Near each entry door:

- a) **“RESTRICTED”**
- b) **“Refer to Operating Manual Supplement for pertinent overweight limitations”.**
- c) For aircraft with more than one seat **“CREW ONLY”.**

On or near the hopper filler opening:

“MAXIMUM LOAD _____ LBS./KG”

Near the airspeed indicator:

Max Operating Speed _____ mph/knots IAS
Min Operating Speed _____ mph/knots IAS
Best Climb Speed _____ mph/knots IAS

On the instrument panel in clear view of the pilot:

“Intentional spins, stalls, acrobatic and abrupt manoeuvres are prohibited”.

4.0 NORMAL PROCEDURES

Include normal procedures for take-off, climb and manoeuvring, including the speeds for takeoff and climb.

5.0 EMERGENCY PROCEDURES

5.1 Power Loss or Engine Failure

In the event of a power loss or engine failure, jettison the hopper load, if possible.

5.2 Overweight Landing

Landing at weights in excess of the normal landing weight of _____ lbs. should only be conducted under emergency conditions, and only when the hopper contents cannot be safely jettisoned. In this event, the aircraft should be flown at an approach speed of _____ (1.3x Vmin). The landing should be made on a smooth hard surface, and the sink rate at touchdown must be minimized.

6.0 PERFORMANCE

Include the following statement from the climb verification check in paragraph 4.3.6.

“The measured rate of climb at _____ lbs., at _____ ft density altitude, at _____ Outside Air Temperature was _____ fpm at an airspeed of _____ IAS with the flaps _____.”

Weight, altitude, temperature can have a significant effect on the aircraft’s performance. The gross weight must be reduced as altitude and temperature increase, if the performance capabilities are to be maintained.

7.0 PILOT DECLARATION FOR INCLUSION IN THE JOURNEY LOG BOOK

I have conducted the operational evaluation of this aircraft type in accordance with the procedures set out in the Request for Exemption form, at a weight of _____ lbs./kg.

On the basis of my evaluation, I, ____ (Pilot), hereby declare that the aircraft listed herein is suitable for restricted overweight aerial application operations when operated in accordance with the (Owner or Company) Operating Manual Supplement.

Name: _____

Licence: _____

Signature: _____

Date: _____

**EXEMPTION FROM PARAGRAPHS 605.03(1) AND 602.07(b) OF THE
CANADIAN AVIATION REGULATIONS**

Pursuant to subsection 5.9(2) of the *Aeronautics Act*, and in consideration of the request for exemption made by (Owner/Company, Address) and the declaration made by (Pilot), I hereby exempt persons operating the aeroplanes for the company listed herein from the application of the following provisions. The purpose of this exemption is to allow agricultural aeroplanes to engage in special purpose operations for the aerial dispersion of jettisonable cargo.

- (a) Exemption from Paragraph 605.03(1)(b) of the *Canadian Aviation Regulations* requiring the aircraft to operate in accordance with the conditions set out in the flight authority; and
- (b) Exemption from Paragraph 602.07(b) of the *Canadian Aviation Regulations* requiring the air operator to operate the aircraft in accordance with the aircraft operating limitations.

APPLICATION CONDITIONS

1. This exemption applies to the operation of the following aeroplanes:
 - Owner/Company Name and Address:

 - Manufacturer:

 - Model:

 - Registration Marks:
2. The aeroplane must then be operated in accordance with these limitations set out in the Operating Manual Supplement for the aeroplane.
3. The basic aircraft operating manual will apply for those procedures not addressed in the aeroplane’s Operating Manual Supplement.
4. The aeroplane must be clearly and legibly marked “RESTRICTED” near each entry door.
5. No cargo shall be carried in flight other than the material being dispersed.
6. When in overweight condition, the aeroplane must not take-off or land while commercial passenger operations are being conducted at the same airport.
7. The Pilot’s Declaration contained in Attachment “A” must be entered in the aircraft journey logbook.

8. A copy of this exemption must be attached to the Special Certificate of Airworthiness issued for each aeroplane listed herein.
9. Ferry flights may be conducted to reposition the aircraft. Such flights must be conducted in accordance with the limitations of the basic aircraft flight manual.
10. The Maintenance Schedule required by subsection 605.86 of the *Canadian Aviation Regulations* shall also include a special structural inspection of the airframe to take into account the effect of the overweight operation on life limited structural elements.

VALIDITY

This exemption is in effect until the earliest of:

- a) the date on which any condition in this exemption is breached;
- b) the date on which this exemption is superseded by an amendment to the *Canadian Aviation Regulations* and related standards of airworthiness where operational limitations for restricted category aircraft in aerial application operations are brought into effect; and
- c) the date on which this exemption is canceled in writing by the Minister where he is of the opinion that it is no longer in the public interest, or that it is likely to affect aviation safety.

DATED at _____, in _____, Canada, this _____ of _____, 1997, on behalf of the
Minister of Transport.

Regional Director General
Civil Aviation