



Conservation

Environmental Stewardship Division
Environmental Assessment and Licensing Branch
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FAXED

CLIENT FILE NO.: 5121.00

March 18, 2008

Kent Blackmon
Bristol Aerospace Limited
PO Box 874, 660 Berry Street
Winnipeg MB R3C 2S4

Dear Mr. Blackmon:

Enclosed is Environment Act **Licence No. 2807** dated March 18, 2008 issued in accordance with The Environment Act to **Magellan Aerospace Limited operating as Bristol Aerospace Ltd.** for the continued operation of the Development being a commercial and military aeroengine and aerostructure components and assemblies precision manufacturing facility located at 660 Berry Street, Winnipeg, Manitoba, in accordance with the Proposal dated July 14, 2005, and the additional information dated June 28, 2006, July 4, 2007, and September 27, 2007.

In addition to the enclosed Licence requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with.

For further information on the administration and application of the Licence, please feel free to contact Terry Gallagher, Environment Officer at (204) 945-7104.

Pursuant to Section 27 of The Environment Act, this licencing decision may be appealed by any person who is affected by the issuance of this Licence to the Minister of Conservation within 30 days of the date of the Licence.

Yours truly,

Tracey Braun, M. Sc.
Director
Environment Act

Enc.

c: B. Gillespie, Regional Director, Central Region
Terry Gallagher, Environment Officer
Millennium Public Library/Manitoba Eco-Network
City of Winnipeg Community Committee

NOTE: Confirmation of Receipt of this Licence No. 2807 (*by the Licencee only*) is required by the Director of Environmental Assessment and Licensing. Please acknowledge receipt by signing in the space provided below and faxing a copy (letter only) to the Department by March 25, 2008.

On behalf of Magellan Aerospace Limited

Date

****A COPY OF THE LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES****

Manitoba
spirited energy

LICENCE

Licence No. / Licence n° 2807

Issue Date / Date de délivrance March 18, 2008

In accordance with The Environment Act (C.C.S.M. c. E125) /
Conformément à la Loi sur l'environnement (C.P.L.M. c. E125)

Pursuant to Section 10(1) / Conformément au Paragraphe 10(1)

THIS LICENCE IS ISSUED TO: / CETTE LICENCE EST DONNÉE À :

**MAGELLAN AEROSPACE LIMITED, Operating as BRISTOL AEROSPACE
LTD.; "the Licencee"**

for the continued operation of the Development being a commercial and military aeroengine and aerostructure components and assemblies precision manufacturing facility located at 660 Berry Street, Winnipeg, Manitoba, in accordance with the Proposal dated July 14, 2005, and the additional information dated June 28, 2006, July 4, 2007, and September 27, 2007 and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

"**accredited laboratory**" means facilities accredited by the Standard Council of Canada (SCC), or facilities accredited by another accrediting agency recognized by Manitoba Conservation to be equivalent to the SCC, or facilities which can demonstrate to Manitoba Conservation, upon request, that quality assurance/quality control (QA/QC) procedures are in place equivalent to accreditation based on the Canadian Standard Can/CSA-Z753, extension of the international standard ISO 9000, Guide 25;

"**affected area**" means a geographical area, excluding the property of the Development;

"**appurtenances**" means machinery, appliances, or auxiliary structures attached to a main structure to enable it to function, but not deemed an integral part of it;

"**approved**" means approved by the Director in writing;

"**dangerous good**" means any product, substance or organism designated in the regulations, or conforming with the criteria set out in the regulations, or in any regulation adopted in accordance with The Dangerous Goods Handling and Transportation Act, and includes hazardous wastes;

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"Director" means an employee so designated pursuant to The Environment Act;

"Environment Officer" means an employee so designated pursuant to The Environment Act;

"hazardous waste" means a product, substance or organism that meets the criteria set out in the Classification Criteria for Products, Substances and Organisms Regulation, Manitoba Regulation 282/87, and that is intended for treatment or disposal and includes recyclable material;

"hexavalent chromium" means chromium in an oxidative state of +6 expressed as Cr⁺⁶ unless otherwise indicated, which has the designated CAS Number 18540-29-9;

"noise nuisance" means a continuous or repeated noise, in an affected area, which is offensive, obnoxious, troublesome, annoying, unpleasant or disagreeable to a person:

- a) residing in an affected area;
- b) working in an affected area; or
- c) present at a location in an affected area which is normally open to the members of the public;

if the noise

- d) is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director, and within a 90 day period, from 5 different persons falling within clauses a), b), or c), who do not live in the same household; or
- e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses a), b), or c), and the Director is of the opinion that if the unwanted sound had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90 day period from 5 different persons who do not live in the same household; and
- f) is deemed by the Director, based on available information, to be valid;

"odour nuisance" means a continuous or repeated odour, smell or aroma, in an affected area, which is offensive, obnoxious, troublesome, annoying, unpleasant, or disagreeable to a person:

- a) residing in an affected area;
- b) working in an affected area; or
- c) present at a location in an affected area which is normally open to the members of the public;

if the odour, smell or aroma

- d) is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director, and within a 90 day period, from 5 different persons falling within clauses a), b), or c), who do not live in the same household; or
- e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses a), b), or c), and the Director is of the opinion that if the unwanted odour, smell or aroma had occurred in a more densely populated area there would have been at least 5

written complaints received within a 90 day period from 5 different persons who do not live in the same household; and

f) is deemed by the Director, based on available information, to be valid;

“opacity” means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background;

"particulate matter" means any finely divided liquid or solid matter other than water droplets;

"particulate residue" means that part or portion of an atmospheric emission which is deposited onto a surface;

“point source emission” means any point of emission from the Development where pollutants are ducted into the atmosphere;

"QA/QC" means quality assurance/quality control;

"Standard Methods for the Examination of Water and Wastewater" means the most recent edition of Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association, the American Waterworks Association and the Water Environment Federation; and

"total chromium" means the sum of chromic acid, hexavalent chromium and all other compounds containing chromium;

"volatile organic compound (VOC)" means any organic compound which participates in atmospheric photochemical reactions, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonates, ammonium carbonate, and other compounds which may be exempt by the Director.

GENERAL SPECIFICATIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

1. The Licencee shall implement a high standard of equipment maintenance and good housekeeping and operational practices with respect to the Development, at all times.
2. The Licencee shall reduce the production and dissemination of wastes by initiating and maintaining waste reduction and waste recycling programs.

3. The Licencee shall, upon the request of the Director and in addition to any of the limits, terms or conditions specified in this Licence:
 - a) sample, monitor, analyze and/or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such pollutants or ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, for such duration and at such frequencies as may be specified;
 - b) determine the environmental impact associated with the release of any pollutants from the said Development; or
 - c) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, bioassay data, flow rate measurements and such other information as may from time to time be requested.

4. The Licencee shall, unless otherwise specified in this Licence:
 - a) carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the most current edition of Standard Methods for the Examination of Water and Wastewater or in accordance with equivalent preservation and analytical methodologies approved by the Director;
 - b) carry out all sampling of, and preservation and analyses on, soil and air samples in accordance with methodologies approved by the Director;
 - c) ensure that all analytical determinations are undertaken by an accredited laboratory; and
 - d) report the results to the Director within 60 days of the samples being taken.

5. The Licencee shall carry out any remedial measures, modifications, or alterations, as deemed necessary by the Director, in respect to matters authorized under this Licence.

6. The Licencee shall provide to the Director, upon request, all information required under this Licence, in writing and in such form and content (including number of copies), as may be specified by the Director.

7. The Licencee shall designate an employee, within 60 days of the date of issuance of this Licence, as the Licencee's Environmental Coordinator, whose job description will include assisting the Licencee in complying with the limits, terms and conditions in this Licence and assisting Senior Management of the Licencee to manage environmental issues at the Development. The name of the Environmental Coordinator shall be submitted in writing to the Director within 14 days of appointment.

SPECIFICATIONS, LIMITS, TERMS, AND CONDITIONS

Respecting Air Emissions – Limits

8. The Licencee shall not emit particulate matter from the Development such that:
 - a) particulate matter:
 - i) exceeds 0.23 grams per dry standard cubic metre calculated at 25 degrees Celsius and 760 millimetres of mercury, corrected to 12 percent carbon dioxide from any point source of the Development;
 - ii) exhibits a visible plume with an opacity of greater than 5 percent at any point beyond the property line of the Development; or
 - iii) results in the deposition of visible particulate residue at any time beyond the property line of the Development; or
 - b) opacity from any point source of the Development equals or exceeds:
 - i) 20 percent as the average of any 24 consecutive opacity observations taken at 15 second intervals;
 - ii) 20 percent for more than 16 individual opacity observations within any 1 hour period; or
 - iii) 40 percent for any individual opacity observation.
9. The Licencee shall not emit total chromium at any time from any point source(s) of the Development, in excess of 0.03 milligrams per dry standard cubic metre calculated at 25 degrees Celsius and 760 millimetres of mercury.
10. The Licencee, after January 1, 2010, shall not emit to the atmosphere trichloroethylene at any time at a rate in excess of 0.5 grams per second.
11. The Licencee shall not cause or permit a noise nuisance to be created as a result of the operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate a noise nuisance.
12. The Licencee shall not cause or permit an odour nuisance to be created as a result of the operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.

Respecting Record Keeping and Reporting

13. The Licencee shall, on an ongoing basis, investigate alternate methods and materials for the reduction of VOC emissions from the Development.
14. The Licencee shall submit to the Director, by June 1st of each year, and beginning in 2008, an annual report containing the following information:
 - a) for each process at the Development, for any of the materials used as listed in Attachment 'A' to this Licence, a completed copy of the form entitled "Quarterly Listed VOC Mass Balance in Kilograms By Process at the

- Development" as shown in Attachment 'B' to this Licence, signed by the Environmental Manager of Magellan Aerospace Ltd.;
- b) for each process at the Development, for any VOCs used but not listed in Attachment 'A' to this Licence, a completed copy of the form entitled "Quarterly Non-Listed VOC Mass Balance in Kilograms By Process at the Development" as shown in Attachment 'C' to this Licence, signed by the Environmental Manager of Magellan Aerospace Ltd.;
 - c) a detailed explanation for any increase in VOC use or release from previously reported least quantities;
 - d) a detailed identification and description of all measures including but not limited to: operational or material modifications; equipment upgrades; process modifications; emission control technologies; etc., that have been implemented in this reporting period to reduce the emissions of VOCs, and an estimated quantification of the emissions reduction from each measure which has been implemented; and
 - e) a detailed identification and description of all proposed measures including: operational or material modifications; equipment upgrades; process modifications; emission control technologies; etc., that are intended to reduce VOC emissions and are to be initiated within the next reporting period.

Respecting Trichloroethylene Usage

- 15. The Licencee shall not use more than 4855 kg of trichloroethylene between January 1 and December 31 of any given year.

Respecting Air Pollution Control Equipment

- 16. The Licencee shall direct all air streams, which contain a pollutant(s) of concern to the Director, to a pollution control device which has been designed for and demonstrated to be capable of reducing, altering, eliminating or otherwise treating the pollutant(s).
- 17. The Licencee shall submit for the Director's approval, within 90 days of the issuance of this Licence, a standard operating procedural manual and a maintenance schedule for each air emission pollution control device based on the manufacturer's specifications and recommendations.
- 18. The Licencee, upon receiving the Directors approval as required in Clause 17 of this Licence, shall not operate any process directing an emission to an air pollution control device at the Development unless:
 - a) the operating and maintenance measures and status of the device are in full compliance with the approved procedures and timetables;
 - b) all emissions from the process are directed to the fully operational air pollution control device;

- c) all discharges of treated emissions from the air pollution control devices are immediately directed to a stack; and
 - d) the emissions do not contain concentrations of pollutants which:
 - i) are in violation of any other applicable legal instrument including an Act, Regulation or by-law; or
 - ii) otherwise create a significant negative environmental or health impact in the affected area.
19. The Licencee shall, in case of physical or mechanical equipment breakdown or process upset where such breakdown or upset may result in the emission, release, or discharge of a pollutant, notify the Director:
- a) as soon as possible but no later than within 24 hours of the occurrence; or
 - b) before noon of the first business day following an occurrence on a weekend or statutory holiday.
- Such notification shall be by facsimile or any other notification procedure approved by the Director, stating the nature of the occurrence, the time and estimated duration of the event and the reason for the occurrence.
20. The Licencee shall maintain a log book of the most recent 24 month period to record any downtime of an air pollution control device due to either the breakdown or maintenance of that air pollution control device. The log book shall be kept at the Development and shall be available upon request for inspection by an Environment Officer. The log book shall record, at minimum, the following information:
- a) identification of the air pollution control device and the process(s) it serves;
 - b) time/date of log entry;
 - c) nature and duration of event;
 - d) the accumulated downtime of this air pollution control device for the events for each calendar year; and
 - e) signature of the Environmental Coordinator.
21. The Licencee shall handle, store and dispose of all pollutants collected by the air pollution control equipment in a manner suitable to their characterization as type of waste or dangerous good.

Respecting Air Emissions – Sampling, Analysis, Reporting

22. The Licencee shall provide a stack or stacks, at the request of the Director, at any area of the Development including all necessary sampling facilities for the sampling of air emissions at the Development. The stack or stacks shall be provided:
- a) at a location(s) and within a time frame satisfactory to the Director; and
 - b) to the specifications and in accordance with the most recent version of Manitoba Conservation Guideline, *Guideline for Stack Sampling Facilities*, unless otherwise approved by the Director.

23. The Licencee, within 90 days of a written request from the Director, shall submit a detailed plan for the Development which is acceptable to and approved by the Director, for the sampling and analysis of potential air pollutants, released as point source and fugitive emissions, including any compounds required by the Director. The plan shall identify the rationale for the sampling, the ways and means by which the sampling program will be implemented including any special measures or methods which would be necessitated by influencing factors such as unfavourable weather conditions, the need for large or additional sample volumes, the need for multiple sampling runs, the methods used for the sampling and the analysis for each compound, the detection level to be attained, a comprehensive QA/QC program, and other items as may be identified by the Director.
24. The Licencee shall perform all stack sampling in accordance with the most recent version of Manitoba Conservation Report No. 96-07, *Interim Stack Sampling Performance Protocol*, unless otherwise approved by the Director.
25. The Licencee shall arrange the scheduling of the sampling program, approved pursuant to Clause 23 of this Licence, such that a representative of Manitoba Conservation is available to monitor and audit the implementation of the sampling program.
26. The Licencee shall complete the sampling of emissions requested in Clause 23 of this Licence in accordance with the approved proposal, and within a time frame approved by the Director.
27. The Licencee, within 60 days of the receipt of the analytical results of the sampling program approved pursuant to Clause 23 of this Licence, shall submit a report for the approval of the Director containing at minimum:
 - a) the raw data collected;
 - b) a discussion of the sampling and analytical portions of the program including any anomalies of sampling and analysis; and
 - c) a discussion of the significance of the data gathered with specific attention to:
 - i) the significance for potential acute and chronic impacts to health or environment from exposure to concentrations of the compounds detected;
 - ii) the need for risk assessment of the impact of emissions;
 - iii) the need for the establishment of ambient air monitoring stations;
 - iv) the need for dispersion modeling of emissions;
 - v) results and conclusions of the QA/QC program; and
 - vi) other issues as may be determined by the Director.
28. The Licencee, upon the written request of and in a timeframe stipulated by the Director, shall comply with any air emission or ambient air quality criteria specified by the Director for any pollutant of concern to the Director which has been identified pursuant to Clauses 3, 16, or 27 of this Licence.

Respecting Air Dispersion Modelling of Emissions

29. The Licencee, within 60 days of a written request from the Director, shall submit a proposal for the air dispersion modelling of all emissions from the Development such that any health, environmental or nuisance impact is assessed.
30. The Licencee shall submit, within a time frame stipulated by the Director, a report discussing the results of the air dispersion modelling performed in accordance with the proposal approved pursuant to Clause 29 of this Licence.

Respecting the Operation of Boilers And Heaters

31. The Licencee shall operate new or upgraded boilers or heaters in compliance with the appropriate emission limits for nitrogen oxides and carbon monoxide contained in the most recent edition of the Canadian Council of Ministers of the Environment publication entitled "*National Emission Guideline For Commercial/Industrial Boilers And Heaters – Initiative N306*".

Respecting Chemical Storage and Spill Containment

32. The Licencee shall provide containment for all vessels containing chemicals and in each area of the development where the chemicals are stored, loaded, transferred, used or otherwise handled, in compliance with the National Fire Code of Canada (2005), or any future amendment thereof such that any product leakage or spillage and any contaminated liquid generated is contained within the Development and contamination of groundwater is prevented.
33. The Licencee shall, in a manner approved by the Director, remove and dispose of all spilled dangerous goods.

Respecting Emergency Response Planning

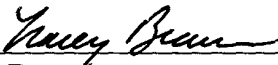
34. The Licencee shall, within 30 days of the issue date of this licence, submit an emergency response contingency plan in accordance with the Manitoba Industrial Accidents Council (MIAC) *Industrial Emergency Response Planning Guide*.

Respecting Decommissioning

35. The Licencee shall submit within one (1) year prior to closure of the facility, for the approval of the Director, a formal detailed Decommissioning Plan for the facility.

REVOCATION

- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new Proposal pursuant to Section 10 of The Environment Act.



Tracey Braun
Director
Environment Act

File: 5121.00

**Attachment 'A' to
Environment Act Licence No. 2807 – Magellan Aerospace Ltd.**

VOC Listing – Magellan Aerospace Ltd. ¹

Common Name	CAS No.	Carcinogen² (Y³/N⁴)
1-Methoxy-2-Propanol Acetate	108-65-6	- ⁵
1,1,2-Trichloroethylene	79-01-6	Y
1,2-Benzenedicarboxylic Acid, Dibutyl Ester	84-74-2	N
1,2,4 Triethylbenzene	95-63-6	-
2-Butoxyethanol	111-76-2	N
2-Ethoxy Ethanol	110-80-5	N
2-Methoxy 1-Propanol Acetate	70657-70-4	-
2-Propoxyethanol	2807-30-9	-
2,4-Pentanedione	123-54-6	-
2,6-Dimethyl-4-Heptanone	108-83-8	-
A/Epichlorohydrin Based Epoxy Resin	25036-25-3	-
Acetone	67-64-1	N
Allphatic/aromatic hydrocarbons	8052-41-3	-
Benzene, 1-Chloro-4 Trifluoromethyl	98-56-6	-
Bis[4-(2,3-Epoxypropoxy)Phenyl]Propane	1675-54-3	-
Bisphenol A-Diglycidyl Ether Resin	25068-38-6	-
Bisphenol A-Epichlorohydrin	25068-38-6	-
Butane	106-97-8	-
Cyclohexanone	108-94-1	N
Diacetone Alcohol	123-42-2	-
Dibasic Ester	1119-40-0	-
Diethanolamine	111-42-2	-
Dimethylacetamine	127-19-5	-
Ethyl 3-Ethoxypropionate	763-69-9	-
Ethyl Acetate	141-78-6	N
Ethylbenzene	100-41-4	N
Ethylene Glycol	107-21-1	N
Ethylene Glycol Monobutyl Ether	111-76-2	N
Formaldehyde	50-00-0	Y
Formaldehyde Polymer	40216-08-8	Y
Hexamethylene Diisocyanate	822-06-6	N
Isopropyl Alcohol	67-63-0	-
Kaolin	1332-58-7	-
Kerosene	8008-20-6	-
Light Aliphatic Solvent Naptha	64742-89-8	-
Light Aromatic Solvent Naphtha	64742-95-6	-
Methanol	67-56-1	N
Methyl Amyl Ketone	110-43-0	-
Methyl Ethyl Ketone	78-93-3	N

Common Name	CAS No.	Carcinogen ² (Y ³ /N ⁴)
Methyl Isoamyl Ketone	110-12-3	-
Methyl Isobutyl Ketone	108-10-1	N
Methyl N-propyl Ketone	107-87-9	-
Methylene Chloride	75-09-2	Y
n-Butyl Acetate	123-86-4	-
n-Butyl Alcohol	71-36-3	N
Nitroethane	79-24-3	-
Petroleum Naptha Aromatic	64742-95-6	-
Polymeric Hexamethylene Diisocyanate	28182-81-82	-
Propane	74-98-6	-
Propylene Glycol Monomethyl Ether	107-98-2	N
Solvent naptha medium aliphatic	64742-88-7	-
Styrene	100-42-5	N
Tetrahydro furan	109-99-9	-
Toluene	108-88-3	N
Triethanolamine	102-71-6	-
Xylene	1330-20-70	N

Notes:

1. The above VOC listing is based on information provided in the EIA and is to be reviewed and updated on an as needed basis by the Licencee. Any additions are to be brought to the attention of the Director.
2. Carcinogenicity based on United States Environment Protection Agency Integrated Risk Information System (IRIS) database. Possible, probable and known carcinogens are to be identified.
3. An identified possible, probable or known carcinogen related to inhalation shown as 'Y'.
4. Not assessed in IRIS database for carcinogenicity related to inhalation, or weight of evidence not conclusive shown as 'N'.
5. Not identified in IRIS database.

