

<Insert Company Name>
703 Company Operations Manual

Multi/Single Engine
Day and Night VFR and IFR

<Insert Company Name>

<Insert Company Address>

<Insert Company City>, <Insert Company Province> <Insert Company Postal Code>

Telephone Number: <Insert Area Code> <Insert Phone Number>

Facsimile Number: <Insert Area Code> <Insert Fax Number>

Initial Issue Date

<Insert Date>

YYYY/MM/DD

Preamble

Guidance:

This Company Operations Manual has been compiled for the use and guidance of operations personnel in the execution of their duties. This manual reflects <Insert Company Name> unwavering commitment to safety. It is the responsibility of each employee to ensure that they are familiar with the contents of this manual and that they follow the procedures laid out in it. The standards, practices, procedures and specifications contained in this Manual are in accordance with the Canadian Aviation Regulations and applicable standards.

Where reference in this Manual is made to the “Air Operator”, the “Company” and/or the “Operator”, it shall be taken to mean <Insert Company Name>.

All amendments, after approval/acceptance by the Regional Manager Commercial and Business Aviation (RMCBA), Transport Canada, shall be promptly inserted into the Manual by the individual or organization shown on the distribution list, as the holder of the Manual, and that person shall be responsible for its safe custody, maintenance and conscientious amendment.

The Operations Manager is responsible for the development, maintenance, distribution and amendment of this Operations Manual. Comments/suggestions for improvement of the Company Operations Manual should be brought to the attention of the Operations Manager.

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GENERAL

<Insert Company
Name>

General

Amending Procedures and Distribution List

Instructions: Where there is a change in any aspect of an air operator's operation or where the company operations manual no longer meets the requirements of the CASS, the air operator shall amend its company operations manual and submit it to the RMCBA, Transport Canada for approval.

Guidance: Manual amendments will be promulgated as required by the Operations Manager. After approval by the RMCBA, Transport Canada, amendments will be issued to manual holders. Each amended page shall show the appropriate amendment number and date. All changes will be clearly denoted. When this manual is amended, a copy of the amendment is to be forwarded to the RMCBA along with the appropriate amendment instructions. Amendment instructions shall include a "Remove Pages" and "Insert Pages" and "Reason for Change" list. The amended text shall be identified by a vertical line in the right-hand margin. When a manual or amendments thereto are superseded, instructions shall be issued to all manual holders to destroy the superseded copies.

Operations Manual Distribution and Control

The Operations Manager shall maintain a master list of manual holders and control their distribution. The following operational personnel will hold copies of this Operations Manual and will be responsible for its amendment: Transport Canada, Operations Manager, Chief Pilot, Director of Maintenance or AMO. Manuals may be assigned to line pilots or aircraft at the discretion of the Operations Manager.

It is the responsibility of the manual holder to insert all amendments issued to him/her in a timely manner and ensure all manual pages are consistent with the LEP. Manuals issued to aircraft shall be amended by the (identify the position/person responsible).

Any discrepancy between the LEP and the actual manual pages shall be brought to the attention of the Operations Manager immediately.

Manual Holders

Manual Copy	Manual Holder	Address	Telephone and Fax Number
Master Copy	Operations Manager	1000 Runway Cres. Somespot, B.C. V1A 2B3	Tel: (111) 123-4567 Fax: (111) 123-5678
Copy #1	Transport Canada Air Carrier Operations	Suite 620 800 Burrard Street Vancouver, B.C. V6Z 2J8	Tel: (111) 666-5657 Fax: (111) 666-0682
Copy #2	Chief Pilot	1000 Runway Cres. Somespot, B.C. V1A 2B3	Tel: (111) 123-4567 Fax: (111) 123-5678

Operations Library

Transport Canada (Aviation) Publications

Aeronautics Act

Canadian Aviation Regulations (CARs) Part 1 - General
All Subparts

Canadian Aviation Regulations (CARs) Part IV - Personnel Licensing and Training
Subpart 400 - General
Subpart 401 - Flight Crew Permits, Licences, And Ratings
Subpart 421 - Personnel Licensing And Training Standards

Canadian Aviation Regulations (CARs) Part VI - General Operating and Flight Rules
Subpart 600 - General
Subpart 601 - Airspace
Subpart 602 - Operating and Flight Rules
Subpart 605 - Aircraft Requirements
Subpart 606 - Miscellaneous

Canadian Aviation Regulations (CARs) Part VII - Commercial Air Services
Subpart 700 - General
Subpart 703 - Air Taxi Operations
Subpart 706 - Aircraft Maintenance Requirements for Air Operators

Commercial Air Service Standards (CASS)
Subpart 723 - Air Taxi Operations
Subpart 726 - Air Operator Maintenance

Aeronautical Information Publication Canada
Canada Flight Supplement
Canada Flight Supplement Water
Appropriate Maps and Charts

Company Manuals

Company Maintenance Control Manual
Company Operations Manual
Company Route Manual - Night VFR & IFR (uncontrolled airspace)

Other Manuals

Aircraft Flight Manuals of Aircraft operated by <Insert Company Name>:
List Aircraft Flight Manuals

CHAPTER

1

*<Insert Company
Name>*

*Chapter 1: Operating
Certificate and Operations
Specifications*

Chapter 1

1.1 Operating Certificate and Operations Specifications

<Insert Air Operating Certificate and Operations Specifications along with the maintenance specifications issued to the Air Operator.>

NOTE: Any changes to the Air Operator Certificate or Operations Specifications or Maintenance Specifications are to be treated as amendments to the Company Operations Manual and recorded as amendments, then distributed accordingly to Company Personnel.

CHAPTER

2

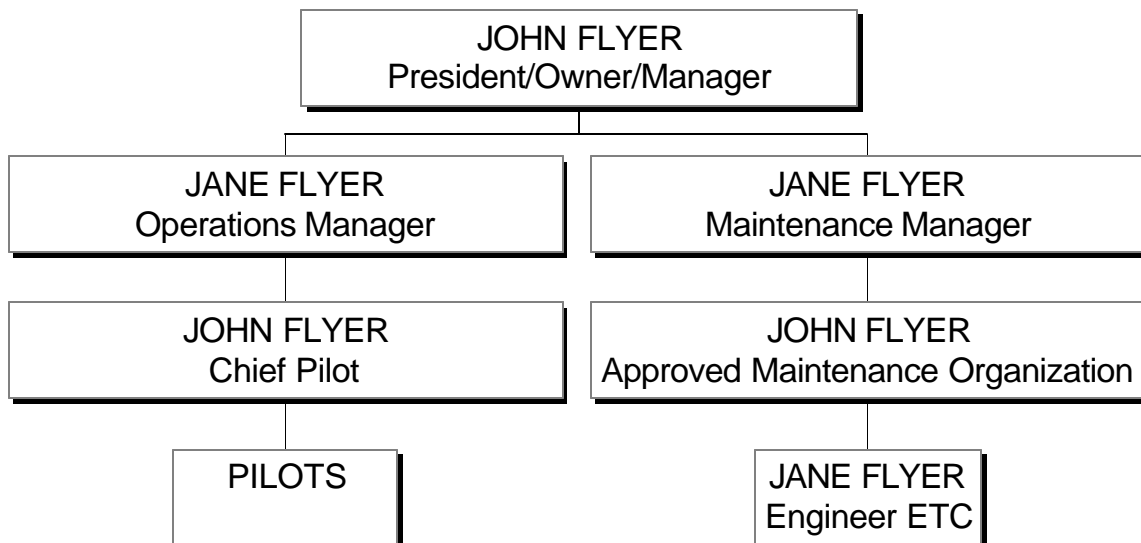
<Insert Company
Name>

Chapter 2: Company Organization

Chapter 2

2.1 Company Management Structure

<Insert Company Name>
Organizational Structure



2.1.1 Management / Supervisory Personnel

President:	<Insert Name and Contact Number>
Operations Manager:	<Insert Name and Contact Number>
Chief Pilot:	<Insert Name and Contact Number>
Maintenance Manager:	<Insert Name and Contact Number>
Approved Maintenance Organization:	<Insert Name and Contact Number>
Dangerous Goods Program Coordinator (If Applicable)	<Insert Name and Contact Number>

2.2 Duties and Responsibilities

2.2.1 Operations Manager

The Operations Manager is responsible for the;

- a) safe control of operations and operational standards of all aeroplanes operated;
- b) the identification of operations coordination functions which impact on operational control (eg. maintenance, crew scheduling, load control, equipment scheduling);
- c) supervision, organization, function and manning of the following:
 - i) flight operations;
 - ii) cabin safety;
 - iii) crew scheduling;
 - iv) training programs; and
 - v) flight safety.
- d) the contents of the air operator's Company Operations Manual;
- e) the supervision of and the production and amendment of the Company Operations Manual;
- f) liaison with the regulator authority on all matters concerning flight operations, including any variations to the air operator's Air Operator Certificate;
- g) liaison with any external agencies which may affect air operator operations;

- h) ensuring that the air operator's operations are conducted in accordance with current regulations, standards and air operator policy;
- i) ensuring that crew scheduling complies with flight and duty time regulations;
- j) ensuring that all crew members are kept informed of any changes to the regulations and standards;
- k) the receipt of any aeronautical information affecting the safety of flight and if necessary taking corrective action;
- l) the dissemination of aeroplane safety information, both internal and external;
- m) qualifications of flight crew member; and
- n) maintenance of a current operations library.

NOTE: In his or her absence, all responsibilities for operational duties shall be delegated to another individual qualified in accordance with Canadian Aviation Regulations except that the knowledge requirements detailed under Operations Manager qualifications may be demonstrated to the air operator rather than the minister.

2.2.2 Chief Pilot

The Chief Pilot is responsible for the professional standards of the flight crews under his authority, and in particular;

- a) developing standard operating procedures;
- b) developing or implementing all required approved training programs for the air operator's flight crews;
- c) issuing directives and notices to the flight crews as required;
- d) the operational suitability and requirements of all aerodromes and routes served by the operator;
- e) the processing and distribution of accident, incident, and other occurrence reports, and if necessary taking corrective action;
- f) the processing of any crew reports and if necessary taking corrective action;
- g) the supervision of flight crew; and
- h) assuming any responsibilities delegated by the Operations Manager

NOTE: In his or her absence, all responsibilities for operational duties shall be delegated to another individual qualified in accordance with Canadian Aviation Regulations except that the knowledge requirements detailed under Chief Pilot qualifications may be demonstrated to the air operator rather than the Minister.

2.2.3 Pilot-in-Command

The Pilot-in-Command (PIC) is responsible to the Chief Pilot and will ensure the safe conduct of a flight.

The Pilot-in-Command will ensure that each flight is conducted in accordance with all regulations and the company operations manual.

2.2.4 Second-in-Command

The Second-in-Command (SIC) shall assist the PIC in the management of the flight and manipulation of the aircraft controls in accordance with the directions of the PIC. The SIC may carry out take-offs and landings under the authority of the PIC and shall take over control in the event of PIC incapacitation.

2.2.5 Maintenance Manager

The Maintenance Manager is responsible for the planning and control of all maintenance, liaison with Transport Canada on maintenance topics, and liaison with the Approved Maintenance Organization performing maintenance on company aircraft. The Maintenance Manager is authorised to remove aircraft from operation because of non-compliance with Canadian Air Regulations or because the operation of the aircraft could have an adverse effect on the safety of the aircraft, other aircraft, persons, animals or property.

The Maintenance Manager may assign to another person management functions for specific maintenance control activities if the assignment and the function are described in the Maintenance Control Manual.

CHAPTER

3

*<Insert Company
Name>*

*Chapter 3:
Operational Control System*

Chapter 3

3.1 Operational Control System - Standards

3.1.1 Definition

Operational control means the exercise of authority over the formulation, execution and amendment of an operational flight plan in respect of a flight. Insert company name uses a Type D Operation Control System.

3.1.2 Responsibility and Authority

Operational control is delegated to the Pilot-in-Command of a flight by the Operations Manager, who retains responsibility for the day-to-day conduct of flight operations. Flights operated under this system are self-dispatched and released by the pilot-in-command.

3.1.3 Information Centres

Current information on the location of Insert company name aircraft will be maintained at the main base of operations at (name of airport), the sub-base (name of sub-bases) or, where appropriate, from the location from which flight following is being is being carried out.

3.1.4 Communications

Each aircraft shall be equipped with serviceable and functioning communications equipment that permits the Pilot-in-Command to communicate with a ground radio station for the purpose of flight following. Such a ground station may be operated by the government, the air operator or a private agency

3.1.5 Personnel On Duty

A person, qualified and knowledgeable in the air operator's flight alerting procedures, shall be on duty or available when IFR or VFR at night flight operations are being conducted.

3.2 Flight Preparation Procedures

The Pilot-in-Command is responsible for flight preparation procedures, and before commencing a flight he/she shall be familiar with the available information that is appropriate to the intended flight. Flight preparation procedures will include: list your Company requirements, such as, weather, NOTAMS, publications, aircraft status, flight planning, weight and balance, completion of Operational Flight Plan, filing of VFR flight plan/itinerary, completion of other Company documents, etc.

A flight release will deemed to have been given when the pilot-in-command has determined that:

- a) the flight may be conducted in accordance with the Air Operator Certificate and Specifications, issued to the company, and all Canadian Aviation Regulations and Standards;
- b) the validity of all required licences, permits, certificates, has been verified;
- c) all required aircraft maintenance work has been completed (aircraft is airworthy) and sufficient time remains on the aircraft before the next required maintenance, to complete the job for which the aircraft is being released; and
- d) an Operational Flight Plan/Flight Plan/Flight Itinerary has been completed as appropriate.

In the event that a new requirement for a flight develops when operating away from base, the pilot-in-command, will have the authority to release the aircraft after having satisfying him/herself that conditions a) to d) in the preceding paragraph have been met.

3.3 Operational Flight Plan

3.3.1 Requirement

A Company Operational Flight Plan (Annex "A: of Section 7) shall be completed for every flight. The Pilot-In-Command shall leave one copy at the point of departure and carry another copy on board the aircraft to the final destination of the flight. For local flights (within 25 miles of the departure aerodrome) or flights that terminate at the departure aerodrome, all items of the Operational Flight Plan need not be completed. In this case the minimum information shall be: weight and balance, passenger manifest, route and duration of flight. The Pilot-in-Command will sign the completed Operational Flight Plan and a copy will be left at the point of departure.

3.3.2 Retention Period

Operational Flight Plans (OFPs) will be retained until completion of the next Transport Canada audit on the Company. When an audit has been completed, OFPs up to the date of the audit may be destroyed. OFPs from the date of the audit forward must be kept until the next audit.

3.4 Flight Following, Flight Watch and Communication Requirements

3.4.1 Definition

Flight following for a type D system is the monitoring of a flight's progress and the notification of the company or search-and-rescue authorities if the flight is overdue or missing. All flights will be flight followed.

3.4.2 Requirements

Each IFR flight shall be conducted under an IFR Flight Plan or IFR Flight Itinerary as appropriate.

Each VFR flight shall be conducted under VFR Flight Plan or VFR Flight Itinerary as appropriate, except where the flight is conducted within 25 nautical miles of the departure aerodrome.

All flights operating between Canada and a foreign State require a Flight Plan.

A Flight Plan or Flight Itinerary shall contain such information as specified by the Minister in the Canada Flight Supplement.

The Pilot-in-Command of an aircraft for which an IFR Flight Plan or an IFR Flight Itinerary has been filed who intends to make any change in respect of the cruising altitude or flight level, the route of flight or the destination aerodrome, shall notify an ATC unit or the responsible person as soon as practicable of the intended change. When on an IFR Flight Plan in controlled airspace any of the above changes or changes to the true airspeed or Mach number require an air traffic control clearance before making the intended change.

The Pilot-in-Command of an aircraft for which a VFR Flight Plan or a VFR flight Itinerary has been filed who intends to make any changes in respect of the route of flight, the duration of the flight or the destination shall notify as soon as practicable an ATC unit, an FSS, a community aerodrome radio station or the responsible person of the intended change.

The Pilot-in-Command is responsible for Flight Watch but shall be supported by the Company Flight Following System that shall monitor the progress of each IFR and VFR at night flight from its commencement to its termination including any intermediate stops.

The person performing the flight following function, who may be the same as the “ON DUTY” (Para 3.1.5), shall be delegated to do so by the Operations Manager. To satisfy these requirements the Pilot-in-Command shall be responsible for passing messages concerning landings and departures from the point of origin, at enroute stops and the final destination. If a flight follower other than an air traffic service provider is used, that person must receive flight follower training in accordance with Section 6 of this manual and be given a copy of the Company Operational Flight Plan and flight itinerary if required, and any other pertinent information required to safely flight follow.

The Pilot-in-Command shall maintain a listening watch on the appropriate frequency and, where required, establish communication with an air traffic service unit or community aerodrome radio station (CARS) as applicable on the appropriate frequency.

3.5 Dissemination of Company Operational Information

<Insert Company Name> will disseminate operational information to pilots and other personnel through the use of Company Directives and Bulletins. Directives and Bulletins will be kept on a file with a “signed as having read” signature block. Pilots will check the file before each flight, read new items and sign as having read.

The Operations Manager will ensure that any other <Insert Company Name> personnel are aware of the latest information. The Operations Manager shall also notify pilots who are operating away from the main base of pertinent new information.

3.6 Aircraft Library

Each aircraft will have a library containing:

- a) an AIP;
- b) a CFS;
- c) appropriate VFR charts;
- d) a Company Operations Manual; and
- e) an Airplane Flight Manual
- f) list other appropriate supplements such as; floats, GPS, etc.

3.7 Weight and Balance Control System

The Pilot-in-Command (PIC) will ensure that for every phase of flight, (take-off, cruise and landing), the aircraft is operated within the Weight and Balance, and centre of gravity limitations specified in the aircraft flight manual and current weight and balance report.

Flight shall not be commenced unless the Pilot-in-Command (PIC) has completed a weight and balance calculation in accordance with the following:

- a) Subject to section (2) below, a determination is made of the location of the centre of gravity including the longitudinal position and where required, lateral and vertical positions;
- b) The PIC may utilize the sample pre-computed aircraft configurations as a guide. These samples ensure that for every phase of flight, (take-off, cruise, and landing), the load restrictions, weight and centre of gravity of the aircraft, conform to the limitations specified in the aircraft flight manual;

The maximum Centre of Gravity variations for all stages of flight are also included in these samples. Should the aircraft configuration fall within these parameters, the weight and centre of gravity limitations shall not be exceeded.

Included in these samples are the following:

- i) aeroplane basic empty weight and centre of gravity, determined in accordance with the Airplane Flight Manual; and
- ii) aeroplane operational empty weight and centre of gravity;

Instruction: Define what your company aeroplane operational empty weights consist of.

NOTE: The “aeroplane operational empty weight” is the actual weight of the aeroplane before loading for dispatch and consists of the aeroplane basic empty weight and may include removable equipment, flight crew members and crew members (including baggage), oil, unusable fuel and emergency equipment and shall be defined by the air operator.

- iii) weight of passengers, *carry-on baggage and checked baggage, determined either by actual weight, by using approved standard weights or by using approved survey weights, and the actual weight of cargo;

*carry-on baggage - unless the aircraft seating is approved for under-seat placement of carry-on baggage, carry-on baggage may only be stowed in the approved aircraft baggage compartment(s).

- iv) weight of the fuel load determined by using either the actual specific gravity or a standard specific gravity (see item (4) below);
 - v) aeroplane loading including, but not limited to, compartment weight and bulk cargo limits, floor loading limits, cargo restraint and loading considering weight and centre of gravity limits;
 - vi) aeroplane zero fuel weight, (as applicable).
- c) Should the PIC not use the samples as described above, the weight and balance calculation should be completed on an approved form; this form should then be included in Section 7 of this manual.
- i) **Instruction:** Include sample weight and balance form(s) applicable to your company’s aircraft types being operated.

For standard company use, the specific gravity for Aviation fuel is:

- 1.6 lbs. per litre
- 6.0 lbs. per U.S. gallon.

Actual cargo weights shall be used at all times for weight and balance calculations;

Whenever possible, actual passenger weights shall be used. In those cases however, where actual passenger weights are not available, the weights in the table below may be used as a guide:

SUMMER (Mar.15 - Oct.14 incl.)		WINTER (Oct.15 - Mar.14 incl.)
182 lbs.	MALE	188 lbs.
135 lbs.	FEMALE	141 lbs.
75 lbs.	CHILDREN (2 to 11yrs.)	75 lbs.
30 lbs.	INFANTS (0 to < 2yrs.)	30 lbs.
NOTE: Where no carry-on baggage is permitted or involved, the weight of males and/or females may be reduced by 8 lbs.		

CHAPTER

4

*<Insert Company
Name>*

*Chapter 4: Operating
Requirements*

Chapter 4

4.1 Fuel and Oil Requirements

The Pilot-in-Command shall not commence a flight or during flight change the destination aerodrome set out in the flight plan or flight itinerary unless the aircraft carries sufficient fuel and oil to:

- a) when operating day VFR, fly to the destination aerodrome and then to fly for a period of 30 minutes at normal cruising speed;
- b) when operating VFR at night, fly to the destination aerodrome and then fly for a period of 45 minutes at normal cruising speed; and
- c) when operating IFR, fly to and execute an approach and a missed approach at the destination aerodrome and thence fly to and land at the alternate aerodrome plus another 45 minutes.

Sufficient fuel shall be provided for:

- a) taxiing and foreseeable delays prior to take-off;
- b) meteorological conditions;
- c) foreseeable air traffic routings and traffic delays;
- d) landing at a suitable aerodrome in the event of loss of cabin pressurization or, in the case of a multi-engined aircraft, failure of any engine, at the most critical point during the flight; and
- e) any other foreseeable conditions that could delay the landing of the aircraft.

4.2 Fueling Procedures

Pilots will supervise the fueling of their aircraft to ensure that it is properly bonded and that the fuel is free of contamination.

4.2.1 Fuel Contamination Precautions

Aircraft should be fueled from a dispensing system that has an approved filter, water separator or monitor to prevent water or sediment entering the aircraft's fuel tanks. If it is necessary to use drums or cans of fuel then the fuel is to be filtered through a proper filter and water separator. A clean chamois or felt lined filter funnel may only be used under dire emergency conditions, recognizing that filter fibres may clog fuel system filters and nozzles. After the emergency flight, the aircraft should be checked following approved maintenance instructions for a contaminated fuel system.

During the preflight check, a reasonable quantity of fuel should be drawn from the lowest point in the fuel system into a clear glass jar. A "clear and bright" visual test should be made to establish that the fuel is completely free of visible solid contamination and water (including any resting on the bottom or sides of the container) and that the fuel possesses an inherent brilliance and sparkle in the presence of light.

4.2.2 Bonding Requirements

The aircraft and fueling equipment through which fuel passes all require bonding. The hose nozzle must be bonded to the aircraft before the tank cap is removed. All funnels or filters used in fueling are to be bonded together with the aircraft. Grounding of the fuel service vehicle and bonding of the service vehicle and hose nozzle to the aircraft, before fueling begins, should safely dissipate any static or stray electricity that has built up in the aircraft or service vehicle. Bonding prevents sparks by equalizing or draining the electric potentials. When using drum fuel the drum must be bonded to the aircraft before opening either the drum or aircraft fuel caps.

4.2.3 Fueling with Passengers On- Board

Aircraft may be fueled with passengers on board, embarking or disembarking, under the following conditions:

- a) The pilot supervises the fueling and remains near the aircraft to immediately communicate with and assist in the evacuation of passengers in an emergency;
- b) all exits are clear of obstruction and available for passenger evacuation;
- c) the aircraft engines are not running;
- d) electrical power supplies are not being connected or disconnected, and any equipment likely to produce sparks or arcs is not being used;
- e) smoking is not permitted in the aircraft or in the vicinity of the aircraft, no smoking sign on board the aeroplane is illuminated, as applicable;
- f) fueling is suspended when there are lightning discharges within 8 km of the aircraft;

- g) combustion heaters in the aircraft or in the vicinity of the aircraft are not operated;
- h) known high energy equipment such as High Frequency (HF) radios are not operated, unless in accordance with the approved flight manual where the manual contains procedures for the use of this equipment during fueling; and
- i) photographic equipment is not used within 10 feet (3m) of the fueling equipment or the fill or vent points of the aircraft fuel systems.

4.3 VFR Operating Weather Minima

When operating under VFR, the company aircraft shall not enter cloud at any time and be operated with visual reference to the surface.

4.3.1 Controlled Airspace

- a) Control Area
 - i) Flight visibility shall not be less than three miles; and
 - ii) Distance from cloud shall not be less than 500 feet vertically and 1 mile horizontally.
- b) Control Zone
 - i) Flight visibility and when reported, ground visibility, shall not be less than three miles.
 - ii) Distance from cloud shall not be less than at least 500 feet vertically and 1 mile horizontally.
 - iii) Special VFR may be authorized by an Air Traffic control unit when the flight visibility (in the absence of a reported ground visibility), is not less than 1 mile and the aeroplane is operated clear of cloud with visual reference to the surface at all times. Aircraft shall be equipped with a radio capable of communicating with the ATC unit. When operating SVFR at night, ATC will only authorize special VFR for the purposes of allowing an aircraft to land at destination. No Special VFR will be authorized for departures at night.

4.3.2 Uncontrolled Airspace

- a) Where operations are conducted at or above 1000 feet AGL;
 - i) day flight visibility must not be less than 1 mile;
 - ii) night flight visibility must not be less than 3 miles; and

- iii) distance of the aircraft from cloud must not be less than 500 feet vertically and 2000 feet horizontally.
- b) Where day operations are conducted at less than a 1000 feet above AGL;
 - i) flight visibility must not be less than 2 miles, (unless authorized in AOC); and
 - ii) the aircraft is operated clear of cloud.

4.3.3 VFR Flight Minima - Uncontrolled Airspace

If your company intends to operate to reduced VFR limits of one mile in uncontrolled airspace, include the contents of CAR regarding Minimum Visual Meteorological Conditions for VFR Flight in Uncontrolled Airspace and the CASS VFR Flight Minima - Uncontrolled Airspace here, otherwise delete this paragraph.

4.3.4 Day VFR Instrument and Equipment Requirements

For all flights conducted under Day VFR and Special VFR rules, aircraft shall be equipped with instruments and equipment in accordance with CARs Power-driven Aircraft - Day VFR.

4.4 IFR and Night VFR Flight

All IFR and night VFR flights shall be conducted along airways or air routes designated as such in the Designated Airspace handbook or the Pacific Region catalogue of Approved Routes.

The flight visibility shall not be less than 3 miles for flights in VFR at night.

Pilots may fly IFR or Night VFR using routes in uncontrolled airspace that are not yet contained in the record of company routes, subject to the routes meeting the specifications contained in the Commercial Air Service Standards Routes in Uncontrolled Airspace.

4.5 IFR Procedures

All <Insert Company Name> IFR flights will operate in accordance with the following:

4.5.1 Take-off Minima

- a) Weather below landing limits
- b) A take-off may be conducted in IMC when weather conditions are above take-off, but below landing minima for the runway in use when:
 - i) the aeroplane is twin-engined;
 - ii) an alternate aerodrome is specified in the IFR flight plan; and
 - iii) that aerodrome is located within the distance that can be flown in 60 minutes at the normal cruising speed.
- c) Weather below published take-off minima
- d) A take-off in a turbine-powered aeroplane may be conducted in IMC below the weather minima specified in the Canada Air Pilot when:
 - i) Take-off minima reported visibility RVR 1200 feet (1/4 mile - Aeroplanes With Certified Engine-Out Take-Off and Climb Performance
 - the Company Operations Manual shall contain detailed guidance on how to determine departure one engine inoperative climb gradient and obstacle clearance;
 - a take-off alternate within 60 minutes flying time base on still air normal cruising speed is specified in the flight plan. The take-off alternate aerodrome weather minima shall meet the alternate requirements set out in the Canada Air Pilot;
 - the runway is equipped as detailed in the manual of Aerodrome Standards and Recommended Practices (TP-312) with serviceable and functioning high intensity runway lights or runway centre line lights or with runway centre line markings that are plainly visible to the pilot throughout the take-off run;
 - the pilot-in-command is satisfied that the required RVR 1200 feet or 1/4 mile visibility exists for the runway to be used before commencing take-off;
 - the pilot-in-command and second-in-command attitude instruments (artificial horizons) on the aeroplane shall incorporate pitch attitude index lines in appropriate increments above and below the zero pitch reference line to at least 15 , and are capable of ensuring ready depiction of total aeroplane attitude. An approved failure warning system which will immediately detect essential instrument and equipment failures or malfunctions shall be installed and operative. For the purpose of reduced visibility take-offs, essential instruments are defined as attitude indicators, directions gyros and Horizontal Situation Indicators (HSI);

- The flight crew members shall have received training in accordance with Section 6 Annex "A" Part X of this manual;
 - the chief pilot has certified in the document certifying qualifications and proficiency that the pilot-in-command is competent to conduct an RVR 1200 feet (1/4 mile) take-off.
- ii) the pilot-in-command shall have at least 100 hours of pilot-in-command experience on the aeroplane type. A pilot-in-command converting onto an aeroplane type similar to that on which he had been maintaining pilot-in-command qualifications at these limits for at least 90 days prior to conversion may be authorized these limits by the air operator on completion of required line indoctrination. Similar aeroplanes shall be considered as turbo-propeller to turbo-propeller or turbo-jet to turbo-jet.
- e) Take-off minima reported visibility RVR 1200 feet (1/4) mile) -Aeroplanes Without Certified Engine-Out Take-Off and Climb Performance.

The following requirements must be met:

- i) the Company Operations Manual shall contain detailed guidance on how to determine single-engine climb gradient and obstacle clearance;
- ii) a take-off alternate within 60 minutes flying time based on still air normal cruising speed is specified in the flight plan. The take-off alternate aerodrome weather minima shall meet the alternate requirements set out in the Canada Air Pilot:
- iii) the take-off weight of the aeroplane shall not exceed the weight determined from the Aeroplane Flight Manual that, considering the runway characteristics and ambient weather conditions, meets the following requirements:
- the required Accelerate-Stop Distance shall not exceed Accelerate-Stop Distance Available (ASDA); and
 - the required engine-out take-off distance shall not exceed Take-off Distance Available (TODA).
- NOTE:** Where the manufacturer does not provide data for single-engine take-off distance, but provides data for engine-out climb in the take-off configuration, the aeroplane weight shall permit a positive rate of climb using the configuration and speed at lift-off.
- iv) the runway is equipped as detailed in the manual of Aerodrome Standards and Recommended Practices (TP-312) with serviceable and functioning high intensity runway lights or runway centre line lights or with runway centre lines markings that are plainly visible to the pilot throughout the take-off run;
- v) the pilot-in-command is satisfied that the required RVR 1200 (1/4 mile) visibility exists for the runway to be used before commencing take-off;

- vi) the pilot-in-command and first officer attitude instruments (artificial horizons) on the aeroplane shall incorporate pitch attitude index lines in appropriate increments above and below the zero reference line to at least 15 , and are capable of ensuring ready depiction of total aeroplane attitude. An approved failure warning system which will immediately detect essential instrument and defined as attitude indicators, directional gyros and HSI's'
- vii) the flight crew members shall be given training in accordance with Section 6, Annex "A", Part IX, as applicable, and must also complete annual training in a simulator for the type, certified to Level B or higher, during which RVR 1200 take-offs are practiced.
- viii) the Chief Pilot has certified in the document certifying qualifications and proficiency that the pilot-in-command is competent to conduct an RVR 1200 feet (1/4 mile) visibility take-off;
- ix) the pilot-in-command shall have at least 100 hours of pilot-in-command experience on the aeroplane type. A pilot-in-command converting onto an aeroplane type similar to that on which he had been maintaining pilot-in-command qualifications at these limits for at least 90 days prior to conversion may be authorized these limits by the air operator on completion of required line indoctrination. Similar aeroplanes shall be considered as turbo-propeller to turbo-propeller or turbo-jet to turbo-jet.

NOTE: Include in your manual only what is applicable of the above.

4.5.2 Instrument Approach Procedures

Instrument approach procedures shall be those specified in the Canada Air Pilot, Insert company name air operator certificate operations specifications or the insert name of Transport Canada Region route and approach inventory.

Instrument approaches shall be performed in accordance with the weather and approach facility requirements specified in the General Section of the Canada Air Pilot as amended from time to time.

Instrument approach procedures shall not terminate in a landing unless, prior to landing, the PIC ascertains by means of radio communication or visual inspection the wind direction and speed and the condition of the intended landing surface.

a) Altimeter Setting

Before commencing an approach, the pilot-in-command will ensure that the aircraft altimeters are set to the current altimeter setting for the approach to be conducted

b) Wind Direction and Speed

Instrument approach procedures shall not terminate in a landing unless, prior to landing, the pilot-in-command ascertains by means of a radio communication or visual inspection, that the wind direction and speed are suitable for landing.

c) Landing Surface Condition

Instrument approach procedures shall not terminate in a landing unless, prior to landing, the pilot-in-command ascertains by means of a radio communication or visual inspection, that the condition of the intended landing surface is suitable for landing.

4.5.3 Alternate Aerodrome Requirements

A suitable alternate aerodrome must be included in any IFR flight plan.

Pilots planning flights where an alternate aerodrome is required will select alternates that meet the weather and approach facility requirements specified in the General Section of Canada Air Pilot.

4.5.4 IFR/Night VFR Instrument and Equipment Requirements

For all flights conducted under Night VFR, aircraft will be equipped with instruments and equipment accordance with applicable CAR regarding Power-driven Aircraft - Night VFR

For all flights conducted under IFR, aircraft will be equipped with instruments and equipment in accordance with applicable CAR regarding Power-driven Aircraft - IFR

4.5.5 Additional Equipment for Single Pilot IFR Operations

For single pilot operations the aircraft shall be equipped with:

- a) an auto-pilot that is capable of operating the aircraft controls to maintain flight and manoeuvre the aircraft about the lateral and longitudinal axis;
- b) a headset with a boom microphone or equivalent and a transmit button on the control column; and
- c) a chart holder that is placed in an easily readable position and a means of illumination for the chart holder.

4.6 Cockpit Voice Recorder (CVR) Procedures

Applicable to multi-engined turbine-powered aeroplanes that, excluding the pilot seats, has a seating configuration of six or more, and for which two pilots are required by the type certificate of the aircraft or CAR regarding Personnel Requirements Minimum Crew.

The CVR shall be operated continuously from the time electrical power is first provided to the recorder before flight to the time at which electrical power is removed from the recorder after the flight.

No person shall erase any communication pertaining to a flight being undertaken that have been recorded by a cockpit voice recorder.

No communications pertaining to a flight may be erased from a CVR.

For aeroplanes equipped to record the uninterrupted audio signals received by a boom or mask microphone, the flight crew members must use the boom or mask microphone when operating below 10,000 feet MSL.

If the CVR becomes unserviceable the aeroplane may be operated:

- a) in accordance with the approved company MEL for the aeroplane; or
- b) in the absence of an approved MEL, for up to 90 days from the date of failure, provided the aircraft technical records show the date of failure and a placard is installed in full view of the pilot indicating the removal and date of removal of the CVR equipment.

4.7 Navigation and Communication Equipment Procedures

The pilot-in-command will use the appropriate navigation and communication equipment throughout the flight and when IFR in controlled airspace report any malfunction of such equipment immediately to the appropriate ATC unit.

4.8 Collision Avoidance Procedures

The pilot-in-command shall not operate the aircraft in such proximity to another aircraft so as to create a risk of collision.

4.9 Operations in Hazardous Conditions

Flight operations shall not be conducted into known hazardous conditions. Pilots shall familiarize themselves with the available guidance material related to inadvertent flight into hazardous conditions.

Guidance Material in Aeronautical Information Publication - Canada.

AIR 2.5	Flight Operations in Rain
AIR 2.6	Flight Operations in Volcanic Ash
AIR 2.7	Flight Operations near Thunderstorms
AIR 2.8	Low Level Wind Shear
AIR 2.9	Wake Turbulence
AIR 2.10	Clear Air Turbulence
AIR 2.11	Flight Operations in Winter
AIR 2.12.7	Whiteout

Flight operations in high density altitude conditions are to be conducted in accordance with the performance charts in the aircraft flight manual.

4.10 Aircraft Performance Limitations

The aircraft shall be operated in accordance with the operating limitations in the Aircraft Flight Manual, that may be indicated by markings and placards affixed to the aircraft.

4.11 Placement and Securing of Cargo/Carry-On Baggage

All cargo will be secured to prevent shifting in flight, and placed in such a way that no exit or exit lane or access to emergency equipment is obstructed. Carry-on baggage will be securely stowed in certified locations for take-off and landing.

The safety equipment, the normal and emergency exits that are accessible to passengers and the aisles between the flight deck and a passenger compartment must not be wholly or partially blocked by carry-on baggage, equipment or cargo.

All of the cargo that is stowed in a compartment to which crew members have access must be stowed in such a manner as to allow a crew member to effectively reach all parts of the compartment with a hand-held fire extinguisher.

4.12 Passenger and Cabin Safety Procedures

The flight crew must ensure that supervisory control is maintained over the passengers at all times by visual and aural means. This includes while passengers are embarking / disembarking and while the aircraft is in flight.

The Pilot-in-command will ensure the safe movement of passengers to and from the aircraft, and that:

- a) wherever possible, the aircraft is parked so as to avoid passenger(s) exposure to hazardous conditions;
- b) passengers are alerted to hazardous conditions;
- c) guidance, and where necessary, an escort is provided to ensure a safe route to and from the aircraft;
- d) smoking restrictions are enforced;
- e) “Walkman” or similar entertainment system headsets are not be worn while walking to or from the aircraft;
- f) passengers are briefed on how to safely board and deplane when aircraft engines are running; and

NOTE: if you will not permit passengers to board and deplane with the engines running, replace para (f) above with a statement to that effect.

- g) passengers on float planes are alerted to hazards unique to boarding and deplaning aircraft equipped with floats:

Briefing Points

Boarding

- boarding path to aircraft
- location of entry door(s)
- whether engine will be running
- safety markings on dock
- walk along far side of dock until opposite entry door
- step directly across float to entry door
- hazards of prop overhanging dock

Leaving

- step from the door directly across float to dock
- safety markings on dock at destination
- if prop overhangs dock, crew always directs passengers

NOTE: if you are not a float operator, do not include para (g) above in the manual.

Safety Briefing

All passengers will receive a safety briefing prior to flight as per Section 4, Annex “B” of this manual.

a) Passenger Use of Portable Electronic Equipment

Guidance: Any device or equipment that operates by generating an electric current or is powered by an electric source is defined as an electronic device.

Examples of common electronic devices that are carried by passengers on board include: Electronic games, walkmans, CD players, watches, laptop computers, cameras, etc.

Prohibited devices: Any device that intentionally radiates radio frequency signals.

Permitted devices without restrictions: pacemakers, hearing aids, watches, and medical equipment approved for use on board the aircraft, properly certified air operator installed equipment.

Permitted devices with restrictions:

- i) personal life support systems may be operated during all phases of flight, provided that the device does not cause interference with the aircraft's systems or equipment;
- ii) portable two-way radio communication devices may be used subject to all of the following conditions and restrictions being met:
 - use is prohibited at all times when the aircraft engines are running, excluding the auxiliary power unit,
 - when the pre-flight safety briefing begins prior to engine start, use is terminated during the delivery of the pre-flight safety briefing and demonstration; and

Instruction: Insert Company policy regarding verification that devices have been turned off and properly stowed during the delivery of the pre-flight safety briefing and demonstration and while the aircraft engines are running.

- other portable electronic devices may be used, except during take-off, climb, approach and landing.

Instruction: Include Company policy regarding suspected interference with aircraft's system or equipment from the use of portable electronic devices.

h) Use of Child Restraint Devices

Instruction: Insert name of individual responsible for verifying the device meets the acceptance criteria.

Guidance: Devices accepted for onboard use must display the following label(s):

Canadian manufactured devices must indicate compliance with either the Canadian Motor Vehicle Safety Standards (CMVSS) 213 or 213.1 and indicate the date of manufacture as being after January 1, 1981.

Seats manufactured to US standards between January 1, 1981, and February 25, 1985, must bear the label: "This child restraint system conforms to all applicable Federal Motor Vehicle Safety Standards."

Seats manufactured to US standards on or after February 26, 1985, must bear two labels:

- "This child restraint system conforms to all applicable Federal Motor Vehicle Safety Standards"; and
- "THIS RESTRAINT IS CERTIFIED FOR USE IN MOTOR VEHICLES AND AIRCRAFT".

The following devices are not permitted for use onboard: Belly or loop belts, booster seats, vest or harness type devices, Snugglies.

The PIC shall ensure:

- the device is not placed in an emergency exit row or in a seat that would obstruct a passenger's egress or access to emergency equipment;
- the occupant of the device is properly restrained in the device and the device is restrained in the passenger seat using the passenger seat safety belt;

- iii) aft facing devices are secured in the passenger seat facing aft and forward facing devices are secured in the passenger seat facing forward;
- iv) the accompanying adult is briefed on:
 - the occupant of the system should not be removed from the restraint system during preparation for an emergency landing;
 - the occupant of a child restraint system should be braced in accordance with the instructions of the manufacturer of the restraint system, when such instructions are provided; and
 - during an evacuation, the restraint system should remain installed in the passenger seat and only the occupant should be removed from the aircraft.

Instruction: If your Company policy prohibits use of infant restraint devices, insert statement to that effect.

4.13 Use of Aircraft Flight Manuals/Checklists

The Pilot-in-Command will be familiar with the Aircraft Flight Manual (AFM), and shall use the necessary checklists, information and performance data in the AFM for all phases of flight. A copy of the AFM will be available to the pilot during flight.

Checklists or placards for use when handling normal, abnormal, and emergencies conditions shall include:

- a) pre-start check;
- b) pre-take-off check;
- c) post-take-off;
- d) pre-landing check; and
- e) emergency procedures.

Checklist and placards will be used, where possible, when handling emergencies.

Aircraft Standard Operating Procedures (SOPs) shall be used for aeroplanes requiring two pilots.

4.14 Maintenance Inspections and Reporting of Aircraft Defects

The Maintenance Manager will ensure that all scheduled inspections are carried out in accordance with the company Maintenance Control Manual.

The Pilot-in-Command will ensure that the aircraft is serviceable for flight by:

- a) reviewing the journey log book;
- b) performing a pre-flight check;
- c) as necessary, consulting the Maintenance Manager.

The Pilot-in-Command will record all unserviceabilities in the journey log book as soon as possible (ie. after landing). The Pilot-in-Command will advise the Maintenance Manager of all aircraft unserviceabilities who will, in turn, arrange for aircraft repairs.

4.15 Aircraft Critical Surface Contamination

The pilot-in-command shall not commence a take-off in an aircraft that has any frost, ice or snow adhering to any of its critical surfaces. "Critical surfaces" are the wings, critical control surfaces, vertical stabilizers or any other stabilizing surface of an aircraft and, in the case of an aircraft that has rear mounted engines, includes the upper surface of its fuselage.

Where conditions are such that frost, ice or snow may reasonably be expected to adhere to the aircraft, the pilot-in-command must inspect the aircraft immediately prior to take-off to determine whether any frost, ice or snow is in fact adhering to any of its critical surfaces.

Such inspection shall be carried out by:

- a) the pilot-in -command;
- b) a flight crew member designated by the pilot-in-command; or
- c) a person other than a crew member, who:
 - i) is delegated by the operator of the aircraft; and
 - ii) has successfully completed an aircraft surface contamination training program.

When any frost, ice, and/or snow is found adhering to any critical surface, the contaminant will be removed completely before any flight is attempted;

The methods for removing of frozen contaminant include;

- a) the application of heat; ie warm hangar, solar heat (the sun), or the use of a heater;
- b) the application of a deicing/anti icing fluid; or
- c) brushing.

If a clean aircraft for departure cannot be assured, the only acceptable alternative is to cancel or postpone the flight until conditions are acceptable.

<Insert Company Name> pilots shall not commence a flight in or continue a flight into known or expected icing condition where the formation of ice on the aircraft may adversely affect the safety of the flight. In all cases, the pilot-in-command will have the total responsibility in deciding whether or not a flight will operate in conditions of icing.

4.16 Freezing Point Depressants Application Guidelines Tables

Guidance: A copy of Transport Canada's Air Carrier Advisory Circular regarding Aircraft Ground Icing Operations, is included in Section 7 of this manual. This circular contains guidelines (in Tabular format) for the application of Type I Freezing Point Depressant (FPD) fluids and advisory material on holdover times. These tables were developed by the Society of Automotive Engineers (SAE) ad hoc Committee on Aircraft Ground De-icing in conjunction with the International Standards Organization (ISO) committee on "Aerospace Aircraft De-icing and Anti-icing Methods with Fluids". (NOTE: This information will continue to be refined as additional data is acquired. These guidelines should only be used by air operators as a part of, or in conjunction with, an approved ground deicing/anti-icing program).

In using these tables, caution should be exercised since high precipitation rates or high moisture content, high wind velocity, or jet blast will reduce holdover time below the lowest stated in the range. Holdover time will also be reduced when the aircraft's skin temperature is lower than the outside air temperature.

4.17 Crew Qualifications and Proficiency/Competency Checks

Insert company name shall designate for each flight a pilot-in-command, and where the crew includes two pilots a second-in-command.

4.17.1 Licenses

Each pilot shall hold either a valid Canadian Commercial Pilot License (aeroplane), a valid Canadian Airline Transport Pilot License (aeroplane), or a Canadian Foreign Licence Validation Certificate. Each pilot must have a valid medical certificate and hold a valid radiotelephone operators restricted certificate (aeronautical). Each pilot shall be trained in accordance with Section 6 of this manual.

4.17.2 Pilot Proficiency Check and Competency Checks

Pilot Proficiency Checks (PPC's) are required for each pilot operating as pilot-in-command (PIC) of a multi-engine aeroplane or a single-engine aeroplane operated in IFR or VFR at night, or for pilots flying as second-in-command (SIC) on multi-engined aeroplanes operating under IFR or VFR where the aeroplane is certified for two pilot operation. Where the operation of the aeroplane requires a type rating, and the SIC does not possess the rating he/she shall complete an initial PPC to obtain the rating. Subsequently, the Chief Pilot or his delegate shall conduct an annual competency check. Pilots operating as PIC (except chief pilots) of single-engine aeroplanes under Day VFR require an annual competency check.

PPC's shall be conducted by a Transport Canada Inspector or an approved Company Check Pilot. Competency checks shall be conducted by the Chief Pilot or his delegate. The validity period of a pilot proficiency check, a competency check and the annual training referred to in section 6 expires on the first day of the thirteenth month following the month in which the pilot proficiency check, competency check or training was completed. Where a pilot proficiency check, a competency check or annual training is renewed within the last 90 days of its validity period, its validity period is extended by 12 months.

PPC's and Competency Checks shall be in addition to the annual training requirements.

4.17.3 Currency

Except for training, positioning and ferry flights a pilot must have completed:

- a) three (3) take-offs and landings on type in the previous 90 days; and
- b) if carrying passengers;
 - i) five (5) night or day take-offs and five (5) night or day landings, if the flight is conducted wholly by day; or
 - ii) five (5) night take-offs and five (5) night landings, if the flight is conducted wholly or partly by night; within the previous six (6) months; and

- c) if carrying passengers in single-engine aeroplanes the PIC must have at least five (5) hours flight time as PIC on type; and
- d) if carrying passengers in multi-engine aeroplane the PIC must have at least 15 hours flight time as PIC on type.

NOTE: The flight times in (c) & (d) above may be reduced by one hour for each take-off and landing completed, up to a maximum of 50%.

4.17.4 Single Pilot IFR Requirements

For the operation of an aeroplane with passengers on board in IFR flight without a second-in-command is:

- a) the pilot shall have a minimum of 1000 hours of flight time which shall include, if the type to be flown is multi-engined, 100 hours on multi-engined aeroplanes. In addition, the pilot shall have 50 hours of simulated or actual flight in IMC, and a total of 50 hours flight time on the aeroplane type;
- b) the Pilot Proficiency Check shall be in the aeroplane type flown or if applicable in one of the types grouped for Pilot Proficiency Check renewals and shall include the following:
 - i) knowledge of the auto-pilot operations and limitations;
 - ii) performance of normal and emergency procedures without assistance;
 - iii) passenger briefing with respect to emergency evacuation; and
 - iv) demonstration of the use of the auto-pilot during appropriate phases of flight;
- c) flight in pressurized aeroplanes shall be conducted at or below FL 250; and
- d) a pilot's single pilot proficiency, if still valid, is transferable between air operators which have an Air Operator Certificate authority to conduct such operations and utilize the same type and model of aeroplane.

4.18 Flight and Duty Time Limitations

All pilots will comply with the CAR Division II, Flight Time and Flight Duty Time Limitations and Rest Periods, and CASS , Division II, Standard for Flight Time and Flight Duty Time Limitations and Rest Periods, (see Section 4, Annex "A").

A flight-duty-time form (Section 7, Annex "C") showing days off, rest periods and a running total of flight times will be maintained in the company office by the Operations Manager. Company pilots will inform the Operations Manager of their daily flying times, and length of, and reasons for duty time extensions.

ANNEX – A: Flight Duty Time Limitations/Monitoring System

<Insert Company Name> Flight Duty Time Limitations/Monitoring System

PART I

STANDARD RULES

Standard Flight Time Limitations

The company shall not assign a flight crew member for flight time, and no flight crew member shall accept such an assignment, if the flight crew member's total flight time will exceed:

- a) 1,200 hours in any 365 consecutive days;
- b) 300 hours in any 90 consecutive days;
- c) 120 hours in any 30 consecutive days;
- d) 60 hours in any 7 consecutive days;
- e) 8 hours in any 24 consecutive hours for Single Pilot IFR Flights.

Standard Flight Duty Time

The company shall not assign a flight crew member for flight duty time, and no flight member shall accept such assignment, if the flight crew member's flight duty time will, as a result, exceed 14 consecutive hours in any 24 consecutive hours.

Flight and duty times may be extended where:

- a) the flight is extended as a result of unforeseen operational circumstances; and
- b) the pilot in-command, after consultation with the other flight crew members, considers it safe to do so.

“Unforeseen operational circumstance” means an event, such as unforecast adverse weather, an equipment malfunction or, an air traffic control delay, that is beyond the control of the air operator.

Flight and duty times may be extended, for unforeseen operational circumstances, by up to 3 consecutive hours provided that:

- a) the subsequent minimum rest period shall be increased by an amount at least equal to the extension of the flight duty time;
- b) the pilot-in-command shall notify the air operator, of the length of and reason for the extension, as per form at Section 7, Annex “D”;

- c) the air operator shall retain the notifications until the completion of the next Transport Canada audit; and
- d) the air operator shall notify the Minister as soon as practicable.

Flights shall be planned to be completed within the maximum flight time and maximum flight duty time taking into account the time necessary for pre-flight and post-flight duties, the flight or series of flights, forecast weather, turn-around times and the nature of the operation.

Minimum Rest Period

Minimum Rest, is a period of time in which the pilot is free from all duties, is not interrupted by the company, and is provided an opportunity to obtain not less than eight (8) consecutive hours of sleep in suitable accommodation, time for meals and personal hygiene, and time to travel to and from the rest facility.

Flight crew members shall use rest periods to obtain the necessary rest to be adequately rested prior to reporting for flight duty.

Standard Time Free From Duty

The company shall provide each flight crew member with the following time free from duty:

- a) one period of at least 24 consecutive hours 13 times within each 90 consecutive days and 3 times within each 30 consecutive days;
- b) where the flight crew member is a flight crew member on call, one period of at least 36 consecutive hours within each 7 consecutive days or one period of at least 3 consecutive calendar days within each 17 consecutive days.
- c) The company shall notify a flight crew member on call of the commencement and duration of the flight crew member's time free from duty.

Time Free From Duty

Means a period of time during which insert Company Name cannot assign to a flight crew member any company related duty to be performed during the period including standby, on call, and reserve.

Flight Crew Members On Reserve

"Flight crew member on reserve" - means a flight crew member who has been designated by an air operator to be available to report for flight duty on notice of more than one hour.

Pilots on reserve will be provided with an opportunity to obtain at least 8 consecutive hours sleep in any 24 consecutive hours by one of the following methods:

- a) <Insert Company Name> shall provide the pilot with 24 hours notice of the time of commencement and duration of the rest period. The designated rest period cannot shift more than 3 hours earlier or later than the preceding rest period, nor more than a total of 8 hours in any 7 consecutive days;
- b) the pilot shall be given a minimum of 10 hours notice of the assignment and shall not be assigned any duty for these 10 hours; or
- c) <Insert Company Name> shall not assign the pilot to flight duty time and shall not interrupt the pilot's rest period between 22:00 and 06:00 local time.

Where <Insert Company Name> is unable to provide a pilot with a rest period as above and the pilot is notified to report for flight duty or the reporting time occurs between 22:00 and 06:00 local time:

- a) the maximum flight duty time shall be 10 consecutive hours; and
- b) the subsequent minimum rest period shall be increased by at least one-half the length of the preceding flight duty time.
- c) Include these Operations Specifications if you are applying for the extended flight and duty times and rest times, if not delete.

PART II OPERATIONS SPECIFICATIONS

Operations Specification No. 92 Increase in Flight Time Limitations

Flight time limitations can be increased for any 6 non-overlapping periods of 30 consecutive days within a 365 consecutive day period, provided the maximum flight time in any aircraft shall not exceed:

- a) 60 hours in any 7 consecutive days;
- b) 150 hours in any 30 consecutive days;
- c) 210 hours in any 42 consecutive days;
- d) 450 hours in any 90 consecutive days;
- e) 900 hours in any 180 consecutive days;
- f) 1,200 hours in any 365 consecutive days.

The accumulated 30-consecutive day, 42-consecutive day and 90-consecutive day flight times may be reset to zero if the flight crew member is provided with at least 5 consecutive days free from all duty.

Operations Specification No. 93 Increase in Flight Duty Time Limitations

When the flight duty time limitations are increased for the 6 NON-OVERLAPPING periods of 30 consecutive days referred to above, the maximum flight duty time may be extended to 15 consecutive hours if:

- a) The minimum rest period is increased by one hour; or
- b) the maximum flight time does not exceed 8 hours in the 24 consecutive hours.

Operations Specification No. 94 Decrease in Time Free from Duty

The number of rest periods required in Part I above, (24 consecutive hours 3 times within each 30 consecutive days), may be replaced by:

- a) following at least 5 consecutive periods of 24 consecutive hours free from duty, a pilot may be assigned duty for up to 42 consecutive days; and
- b) the pilot shall receive at least 5 consecutive periods of 24 consecutive hours free from duty following any assignment that exceeds 30 consecutive days.

ANNEX – B: Passenger Briefing Requirements

<Insert Company Name> Passenger Briefing Requirements

Before each flight, all passengers will be given a thorough safety briefing by the pilot. Individual briefings may be necessary for visually or hearing impaired, mobility or comprehension restricted person, a person responsible for another person (i.e. infant, injured person, etc.). Before each take-off and landing, the pilot-in-command shall visually check that all passengers are seated and secured. Only able bodied persons who are able to operate emergency exits shall be seated next to them.

NOTE: If it is not practical to conduct in-air briefings due to engine noise etc., these briefings may be given on the surface before start.

STANDARD SAFETY BRIEFING

- a) Prior to Take-Off
 - i) Stowage of Carry-on Baggage:
when, where, why and how carry-on baggage is required to be stowed;
 - ii) Seat belt Requirements:
the fastening, unfastening, tightening and general use of safety belts or safety harnesses;
 - iii) Seat backs / Table Trays:
when seat backs must be secured in the upright position and tables stowed;
 - iv) Emergency Exit Locations and Exit Procedures:
the location of emergency exits, and for passengers seated next to an exit, how that exit operates;
NOTE: ** For this briefing item it is recommended that the PIC also perform an actual demonstration of the exit opening procedures.
 - v) Safety Features Cards:
the location, purpose of, and advisability of reading the safety features card;
 - vi) Smoking Regulations:
the requirement to obey crew instructions regarding seat belts and no smoking or “Fasten Seat Belts” and “No Smoking” signs and the location of these signs;

- vii) Emergency Equipment Locations:
the location to any emergency equipment the passenger may have a need for in an emergency situation such as ELT, fire extinguisher, survival equipment (including the means to access if in a locked compartment), first aid kit and life raft;
 - viii) Portable Electronic Devices Restrictions:
the use of passenger operated portable electronic devices. Briefing must state that passenger use of portable two way communications devices such as cell phones, are prohibited during the safety briefing and at any time while the aircraft engine is running
 - ix) Use of Oxygen: (if applicable)
the location, and operation of the fixed passenger oxygen system, including the location and presentation of the masks, the action to be taken by the passenger in order to obtain the mask, activate the flow of oxygen and correctly don and secure the mask. This will include a demonstration of their location, method of donning including the use of elastic band, and operation, and instruction on the priority for persons assisting others; and
 - x) Life Preservers / Personal Floatation Devices (PFD's): (if applicable)
the location, and use of life preservers / PFD's, including how to remove from stowage / packaging and a demonstration of their location, method and time of donning / inflation.
 - xi) Mooring Assistance at Remote Locations: (if applicable)
Brief at least one passenger on the following: emphasize prop arc relative to floats, point out danger areas and markings on floats and to use strut for initial tie up, attach front of float after engine has been shut down
- b) After Take-off: (if not included in the pre-take-off briefing)
 - i) that smoking is prohibited; and
 - ii) the advisability of using safety-belts or safety harnesses during flight.
 - c) In-flight Because of Turbulence:
 - i) when the use of seat belts is required; and
 - ii) the requirement to stow carry-on baggage.

Where no additional passengers have embarked the flight for subsequent take-offs on the same day, the pre-take-off briefing may be omitted provided a crew member has verified that all carry-on baggage is properly stowed, safety belts and harnesses are properly fastened, and seat backs and chair tables are properly secured.

- d) Pre-Landing
 - i) seat belt use, seat back position if applicable, etc.
- e) Post Landing
 - i) remaining seated until aeroplane comes to a complete stop;
 - ii) prior to passenger deplaning, the safest direction and most hazard-free route for passenger movement away from the aeroplane following deplaning, and any dangers associated with the aeroplane type such as pitot tube locations, propellers, or engine intakes.

Individual Safety Briefing

The following passengers require individual safety briefings. If possible, they should not be seated adjacent to emergency exits:

- passengers with restricted mobility
- visually impaired
- comprehension restricted person
- passengers with hearing impairment
- passenger responsible for another person (child / infant)

The individual safety briefing shall include:

- a) any information contained in the standard safety briefing and the safety features card that the passenger would not be able to receive during the normal conduct of that safety briefing; and
- b) additional information applicable to the needs of that person as follows:
 - i) the most appropriate brace position for that passenger in consideration of his/her condition, injury, stature, and / or seat orientation and pitch;
 - ii) the location to place any service animal that accompanies the passenger;

For a mobility restricted passenger who needs assistance in moving expeditiously to an exit during an emergency:

- a) a determination of what assistance the person would require to get to an exit;
- b) the route to the most appropriate exit;
- c) the most appropriate time to begin moving to that exit; and
- d) a determination of the most appropriate manner of assisting the passenger;

For a visually impaired person:

- a) detailed information of and facilitating a tactile familiarization with the equipment that he/she may be required to use;
- b) advising the person where to stow his/her cane if applicable;
- c) the number of rows of seats between his/her seat and his/her closest exit and alternate exit;
- d) an explanation of the features of the exits; and
- e) if requested, a tactile familiarization of the exit;

For a comprehension restricted person:

- a) while using the safety features card, point out the emergency exits and alternate exits, and any equipment that he/she may be required to use;

For persons with a hearing impairment:

- a) while using the safety features card, point out the emergency exits and alternate exits to use, and any other equipment that the person may be required to use; and
- b) communicating detailed information by pointing, face-to-face communication permitting speech reading, pen and paper, through an interpreter or through their attendant;

For a passenger who is responsible for another person on board, information pertinent to the needs of the other person as applicable:

In the case of an infant:

- a) seat belt instructions for adult;
- b) method of holding infant for take-off and landing;
- c) instructions pertaining to the use of a child restraint system;

- d) oxygen mask donning instructions;
- e) recommended brace position; and
- f) location and use of life preservers, as required;

In the case of any other person:

- a) oxygen mask donning instructions;
- b) instructions pertaining to the use of a child restraint system; and
- c) evacuation responsibilities;
- d) for an unaccompanied minor, instructions to pay close attention to the normal safety briefing and to follow all instructions.

NOTE:

- i) A passenger that has been provided with an individual safety briefing need not be re-briefed following a change in crew if the crew member that provided the individual safety briefing has advised a member of the new crew of the contents of that briefing including any information respecting the special needs of that passenger.
- ii) A passenger may decline an individual safety briefing.

Passenger Preparation for an Emergency Landing/Ditching and Evacuation Procedure

All passengers will be briefed in accordance with Section 5.4 of this manual.

CHAPTER

5

<Insert Company Name>

*Chapter 5:
Emergency Procedures and
Equipment*

Chapter 5

5.1 Accident/Incident Reporting

All accidents/incidents will be reported to the Operations Manager or his delegate. The Operations Manager will report all accidents or incidents to the Transportation Safety Board as required by regulation.

When in doubt as to the requirement to report an occurrence, the Operations Manager or his delegate will contact the Transportation Safety Board for clarification. Appropriate guidance material should be consulted regarding the reporting of civil aviation occurrences. AIP Canada

5.2 Procedures for Reporting Overdue Aircraft

Procedures for reporting of overdue aircraft are summarized in Annex “A” of this section.

5.3 Ground Emergency Co-ordination Procedures

Ground emergency coordination procedures are summarized in Annex “A” of this section.

Emergency procedures will be posted in a prominent location at all Company bases of operation.

5.4 Passenger Preparation for an Emergency Landing

The emergency briefing provided in the event of an emergency, where time and circumstances permit, shall consist of instructions pertaining to:

- a) safety belts or safety harnesses;
 - i) lap belts must be fastened snug around the hips. If equipped shoulder harnesses must be used.
 - ii) if carried child/ restraint devices should be checked to ensure they are secured to the aircraft seat with a seat belt and do not restrict access to emergency exits.

- iii) seats belts must remain fastened until the aircraft comes to a complete stop.
- b) seat backs and tables (as applicable);
 - i) seats backs and tables must be secured in the upright and locked position.
- c) carry-on baggage;
 - i) all carry-on baggage including handbags or any other items of mass must be safely stowed in approved locations. Seat pockets may be used for smaller items.
- d) safety features card;
 - i) advise passengers to review the safety features card and to pay particular attention to exit locations and operation.
 - ii) ensure that passengers seated next to emergency exits are willing and able to open that exit. If not, request the assistance of an able bodied person.
 - iii) if possible assign an able bodied person to assist young or special needs passengers.
 - iv) advise passengers of the safest direction and least hazardous route to move away from the aircraft once outside.
- e) brace position (when to assume, how long to remain);
 - i) advise passengers that they will receive two verbal commands:
 - Prior to Landing. The command “Brace”, should be given prior to impact / landing, at which time the passengers will assume and maintain the brace position illustrated on the safety features card until the aircraft has stopped and;
 - After Impact / Landing. If required the command “Evacuate” will be given after the aircraft has stopped and the engines shut down. Passengers should then be instructed to immediately “release seat belts” and “get out” of the aircraft using the nearest useable exit. If an evacuation is not required the command “Remain Seated” will be given.
 - ii) If possible crew members should retrieve the first aid kit and emergency equipment prior to evacuating the aircraft.
- f) life preservers (as applicable).
 - i) if an emergency landing is anticipated on water, advise passengers to immediately locate and don life preservers, secure with straps and to inflate only when outside the aircraft.

5.5 First Aid Kit

Guidance: The contents of the first aid kit required by Canadian Aviation Regulation Operational and Emergency Equipment Requirements for Power Driven Aircraft are the supplies and equipment for a Type A Kit set out in Part X, Schedule II of the Aviation Occupational Safety and Health Regulations, and one pair of latex gloves.

5.6 Emergency/Survival Equipment

Survival Equipment meeting the Canadian Aviation Regulation Operational and Emergency Equipment Requirements Survival Equipment-Flights Over Land, Life Rafts and Survival Equipment Over Water shall be carried on board. A list of the basic equipment is contained in Section 5, Annex “B” of this manual. A list of any equipment added to the basic kit will be kept in the aircraft and by the Operations Manager. The survival pack will contain an up-to-date list of contents and directions for their use.

An emergency equipment inspection form, recording dates and details, will be kept both in the aircraft and by the Operations Manager. Equipment will be inspected at least once per year.

Specific equipment includes:

- survival equipment;
- first aid kit;
- fire extinguishers;
- emergency locator transmitter; and
- life preservers / floatation devices.

5.7 ELT Operating Procedures

ELT's are to be operated in accordance with the guidance material published in Canada Flight Supplement emergency section and operating instructions printed on the ELT.

5.8 Unlawful Interference

In the event of unlawful interference, the flight crew shall endeavor to notify the appropriate ATS unit of this fact, and convey any significant circumstances surrounding the event in order to allow ATS to give priority to the event and minimize any conflict with other aircraft.

If subject to unlawful interference, the flight crew shall endeavor to set the transponder to mode A, Code 7500, to give an indication of the situation unless circumstances warrant the use of Code 7700.

Unless circumstances dictate otherwise, the flight crew should attempt to maintain assigned track and altitude until able to notify ATS or until within Radar Coverage.

Flight crew members should make every attempt to transmit warnings to ATS.

ANNEX – A: Aircraft Accident/Incident/Overdue Emergency Checklists and Instructions

(see Page Two for Checklists)

These Instructions and Checklists will be used at all Company bases of operation and will be posted in clear view near a telephone, communications radio etc. that is likely to be used to report an emergency ie. overdue aircraft, aircraft accident etc. The local phone numbers listed below must be filled in before posting.

1. **REPORT EMERGENCIES IMMEDIATELY AS PER THE APPROPRIATE CHECKLIST**
2. IF ALL INFORMATION IS NOT AVAILABLE **DO NOT** DELAY REPORTING WHILE INFORMATION IS BEING GATHERED.
3. UNLESS **ABSOLUTE** KNOWLEDGE TO THE CONTRARY EXISTS, ASSUME ALL PERSONS ON BOARD:
 - **HAVE SURVIVED**
 - **ARE INJURED**
4. REPORT BY THE FASTEST MEANS AVAILABLE.
5. **IF AT ALL POSSIBLE, REPORT BY THE MOST PRIVATE MEANS.** Think of the consequences to the victims and their families. If you have to use a radio, provide only as much specific information as is absolutely necessary to ensure a rapid response to the emergency, (ie. do not give names etc.)
6. **DO NOT MAKE STATEMENTS TO THE MEDIA.** Once again consider the victims and their families. Media inquiries shall be directed to the Operations Manager.
7. **REMEMBER:**
 - Keep calm - **panic** or **undue haste** can cost lives.
 - Act in a responsible, professional manner.
8. KEEP COMMUNICATIONS LINES CLEAR FOR EMERGENCY PURPOSES ONLY

9. KEEP NOTES ON ALL COMMUNICATIONS, OBSERVATIONS AND ACTIONS

TELEPHONE NUMBERS

POLICE:

HOSPITAL:

AMBULANCE:

FIRE HALL:

RESCUE COORDINATION CENTRE:

TRANSPORTATION SAFETY BOARD:

NEAREST FLIGHT SERVICE STATION:

OPERATIONS MANAGER:

SITE LOCATION (WHERE CALLING FROM):

ANNEX – B: Aircraft Accident/Incident/Overdue Emergency Checklist

(See Page One for Telephone Numbers and other Instructions)

OVERDUE AIRCRAFT

30 MINUTES AFTER ETA (Estimated Time of Arrival)

The **Responsible Person** shall:

- Review the Flight Itinerary
- Begin a communications search
- Contact Operations Manager - have flight itinerary available
- (if Operations Manager unavailable, contact Insert Name at 123-7654. If he is unavailable, contact the nearest FSS)

60 MINUTES AFTER ETA

The **Operations Manager** shall:

- Contact the appropriate air traffic service unit
- Continue the communications search
- Contact the Rescue Co-ordination Centre
- Carry out any other duties determined by the Company (ie. contact next-of-kin etc,)

AIRCRAFT ACCIDENT

The **Responsible Person** shall:

Organize on-site assistance as necessary by contacting:

- Medical Aid
- Ambulance services
- Fire Departments
- Police
- Contact the Operations Manager

The **Operations Manager** shall:

- Contact the Transportation Safety Board
- Contact the Rescue Co-ordination Centre to advise
- Contact the appropriate air traffic service unit.

BASIC SURVIVAL EQUIPMENT - FLIGHT OVER LAND

When carried on Insert company name aircraft, the Basic Survival Equipment will consist of:

1. Waterproof Matches;
2. Means of providing shelter, eg: Six-Man Dome Tent, survival tarpaulin, etc. State what is in your survival kit;
3. Water Purification Tablets;
4. Signal Panel;
5. Signal Mirror;
6. Hand Axe (Hatchet);
7. Survival Knife;
8. Survival Manual, and;
9. Instructions For Use Of Equipment.

SURVIVAL EQUIPMENT - FLIGHTS OVER WATER

Guidance: Where life rafts are required to be carried, in accordance with the Life Rafts and Survival Equipment – Flights Over Water Section of the CAR's, they shall be equipped with an attached survival kit containing at least the following:

- a) a pyrotechnic signaling device;
- b) a radar reflector;
- c) a life raft repair kit;
- d) a bailing bucket and sponge;
- e) a signaling mirror;
- f) a whistle;
- g) a raft knife;
- h) an inflation pump;
- i) a dye marker;

- j) a waterproof flashlight;
- k) a two day supply of water, calculated using the overload capacity of the raft, consisting of one pint of water per day for each person or a means of desalting or distilling salt water sufficient to provide an equivalent amount;
- l) a fishing kit;
- m) a book on sea survival; and
- n) a first aid kit containing antiseptic swabs, burn dressing compresses, bandages and anti-motion sickness pills.

Additional Survival Equipment may be added at any time, and a list of such equipment will be located in the Survival Pack and in the Operation Manager's office.

NOTE: The above list is an example only. Ensure your list accurately reflects the contents of your Company's survival kit.

CHAPTER

6

*<Insert Company
Name>*

*Chapter 6: Training
Program*

Chapter 6

6.1 Company Training General

The Chief Pilot is responsible for the pilot training program. The Operations Manager is responsible for the training program for operational staff other than pilots.

The syllabus of each training program is detailed in this section

6.2 Training Records

The company will maintain a record of all training for each pilot and other person who requires training, recording, as applicable:

- a) name, License number, type and ratings;
- b) medical category and the expiry date;
- c) the dates on which the person, while in the air operator's employ, successfully completed any required training, pilot proficiency check, competency check or examination;
- d) information relating to any failure of the person, while in the air operator's employ, to successfully complete any required training, pilot proficiency check, competency check or examination;
- e) the type of aircraft or flight training equipment used for any required training, pilot proficiency check, competency check;
- f) a copy of the most recent written examination completed by each pilot for each type of aircraft for which the pilot has qualification.

Records will be kept using the form in Section 7 of this manual. All training records will be retained for at least three years.

6.3 Training Program Standards - General

6.3.1 General Information

The syllabus of each training program shall include the programmed time allotted and the subject matter to be covered.

- a) Manuals, if applicable, shall be provided during training to each trainee on the subject matter to be taught.
- b) Relevant training aids such as fire extinguishers, life preservers, rafts, aircraft components, static aircraft, etc. shall be available relevant to the program being presented.
- c) Comprehensive examinations shall be used to validate competence of the trainee.

6.3.2 Flight Crew Training on a Contract Basis

An air operator may contract training to another organization provided:

- a) the arrangement is clearly provided for in the approved training program;
- b) the outside organization uses the manuals and publications used by the air operator (SOP's, Aircraft Flight Manual, Aircraft Operating Manual, if applicable, Company Operations Manual, etc.);
- c) the air operator ensures that the training is conducted in accordance with the approved program;
- d) where type training is conducted the training is provided on the type and model operated by the air operator unless otherwise provided for in the approved training program; and
- e) the air operator maintains training records as required by Subpart 703 of the Canadian Aviation Regulations.

6.3.3 Training and Qualifications of Training Personnel

1. Instructor - Ground Training

- a) has satisfied the air operator that he/she has the knowledge and skills required to conduct the training; and
- b) if conducting aeroplane type training has successfully completed the ground school for the type of aeroplane.

2. Qualifications and Responsibilities of a Training Pilot (Flight Qualifications)

- a) If the Air Operator Certificate authorizes operations IFR:
 - i) hold a valid Airline Transport Pilot Licence and a valid Instrument Rating appropriate for the class of aeroplane; or

- ii) hold a valid Commercial Pilot Licence valid for night and a valid Instrument Rating appropriate for the class of aeroplane, and have accumulated not less than 500 flight hours which shall include not less than 250 flight hours as pilot-in-command appropriate for the class of aeroplanes.
- b) If the Air Operator Certificate authorizes VFR at night:
 - i) hold at least a valid Commercial Pilot Licence valid for night, and a valid Instrument Rating appropriate for the class of aeroplane; or
- c) If the Air Operator Certificate authorizes day VFR only:
 - i) hold at least a valid Commercial Pilot Licence appropriate for the class of aeroplane.

Responsibilities

The Training Pilot is responsible for monitoring the operation and identifying problems which may require the provision of extra training or changes in operational procedures. The training pilot is responsible, together with the Chief Pilot, for the establishment and promulgation of the standards and piloting techniques with which flight crew will be expected to comply during flight operations and which the flight crew will be required to demonstrate during initial and recurrent checks. Particular responsibilities are:

- a) conducting ground, synthetic flight training device and flight training of all flight crew in accordance with the approved training program;
- b) supervision of the standards and recommending amendments to their respective aeroplane operating manuals and standard operating procedures;
- c) maintaining the air operator's training records;
- d) liaison with crew scheduling concerning training details; and
- e) any responsibilities assigned by the Chief Pilot.

3. Qualifications and Responsibility of a Training Pilot (Synthetic Training Device)

Qualifications

- a) hold or have held at least a Commercial Pilot Licence or equivalent, and if the Air Operator's Certificate authorizes IFR an Instrument Rating appropriate for the class of aeroplane;
- b) have completed the air operator's ground school and synthetic training device program for the type of aeroplane;

- c) have successfully completed within the past 12 months a flight check to PPC standards in the synthetic training device or aeroplane for that type;
- d) know the content of the Aeroplane Operating Manual (if applicable), Aeroplane Flight Manual, Operations and Training Manuals and as applicable the Company Check Pilot Manual and the air operator Standard Operating Procedures for the aeroplane type, and the provisions of the regulations and standards; and
- e) have received instruction on the operation of the synthetic training device from an instructor qualified to operate the synthetic training device.

Responsibilities

- a) The Training Pilot is responsible for monitoring the operation and identifying problems which may require the provision of extra training or changes in operational procedures.
- b) The training pilot is responsible, together with the chief pilot, for the establishment and promulgation of the standards and piloting techniques with which flight crew will be expected to comply during flight operations and which the flight crew will be required to demonstrate during initial and recurrent checks. Particular responsibilities are:
 - i) conducting ground and synthetic flight training of all flight crew in accordance with the approved training program;
 - ii) supervision of the standards and recommending amendments to their respective aeroplane operating manuals and standard operating procedures;
 - iii) maintaining the air operator's training records;
 - iv) liaison with crew scheduling concerning training details; and
 - v) any responsibilities assigned by the Chief Pilot.

6.3.4 Training Program Standards

Ground training programs shall provide a means of evaluating the trainee after completion of the syllabus by completion of examination with a review and correction of any errors. Training examinations should be comprehensive and periodically reviewed and updated.

Type training programs are to be titled as to the type to which they apply and include the number of instructional hours to be provided. They should be performance oriented and stress the operation (normal, emergency and malfunctions) of the aircraft systems and equipment. Instruction related to components and systems that flight crews cannot control, influence or operate should be minimized.

ANNEX – A: Company Training

1. Company Indoctrination Training

This training is required upon employment for all persons assigned to an operational control function including base managers, pilots and persons responsible for flight watch or flight following. The program shall ensure that persons involved in control of flight operations are aware of their responsibilities, know company reporting relationships and are competent to fulfil their assigned duties related to flight operations. Company indoctrination training shall include as applicable:

Program Time Allotted: Four hours

- a) Canadian Aviation Regulations;
- b) Air Operator Certificate and Operations Specifications;
- c) company organization, reporting relationships and communication procedures including duties and responsibilities of the flight crew members and the relationship of their duties to other crew members;
- d) flight planning and operating procedures;
- e) fuelling procedures including procedures for fuelling with passengers on board and fuel contamination precautions;
- f) critical surface contamination and safety awareness program;
- g) passenger safety briefings and safe movement of passengers to/from the aeroplane;
- h) use and status of Company Operations Manual including maintenance release procedures and accident/incident reporting procedures;
- i) use of minimum equipment lists (if applicable);
- j) windshear, aeroplane icing, and other meteorological training appropriate to the area of operations;
- k) navigation procedures and other specialized operations applicable to the operator;
- l) accident/incident reporting;
- m) passenger on board medical emergency;
- n) handling of disabled passengers;
- o) carriage of external loads, (if applicable);
- p) operational control system; and
- q) weight and balance system procedures.

2. Technical Ground Training - Initial and Recurrent

This training shall ensure that each flight crew member is knowledgeable with respect to aeroplane systems and all normal, abnormal and emergency procedures. The following subjects shall be included:

- a) aeroplane systems operation and limitations as contained in the aeroplane flight manual and aeroplane operating manual and standard operating procedures;
- b) operation of all equipment that is installed in all aeroplanes of the same type operated by the air operator;
- c) differences in equipment that is installed in all aeroplanes of the same type in the air operators fleet;
- d) applicable standard operating procedures for pilot flying and pilot not flying duties for normal, abnormal and emergency procedures for the aeroplane;
- e) aeroplane performance and limitations; and
- f) weight and balance procedures;

Technical ground training shall be conducted annually.

An aircraft type exam shall be written by each pilot and corrected to 100%.

Programmed time allotted: (select what is applicable for your Company)

Initial: Single-engine
Basic: 5.5 hrs, plus 0.5 hrs (pressurized), plus 0.5 hours (turbine).

Single-engine Turbine IFR/Cargo
16 hours

Single-engine Turbine IFR/Pax
20 hours

Initial: Multi-engine six (6) seats or less
Basic: 7.5 hours plus 4.0 hrs (pressurized), plus 4.0 hrs (turbine).

Multi-engine 7-9 seats
Basic: 12 hours plus 4.0 hrs (pressurized), plus 4.0 hrs (turbine).

Annual: Basic: 2.5 hrs, plus 0.5 hrs (pressurized), plus 0.5 hrs (turbine).

Single-engine Turbine IFR/Cargo/Pax
7.5 hrs

Multi-engine six (6) seats or less

Basic: 3.5 hrs, plus 2.0 hrs (pressurized), plus 4.0 hrs (turbine)

Multi-engine 7-9 seats

Basic: 5.0 hrs, plus 2.0 hrs (pressurized), plus 4.0 hrs (turbine)

3. Synthetic Flight Training Device

- a) A Synthetic Flight Training Device has two classifications:
 - i) Full flight simulator (FFS); and
 - ii) Flight Training Device (FTD)

4. Level A Training Program (if applicable)

An air operator with an approved Level A training program using a Level A or better FFS, approved in accordance with the Aeroplane and Rotorcraft Simulator Manual, is permitted to conduct most initial, upgrade and recurrent training in that simulator. Additionally, flight training in an aeroplane must be carried out for general handling and landing manoeuvres for initial and upgrade training.

- a) The following training in standard operating procedures for normal, abnormal and emergency operation of the aeroplane systems and components shall be carried out in the FFS:
 - i) use of aeroplane checklists;
 - ii) flight and cabin crew co-operation, command and co-ordination;
 - iii) aeroplane and cargo fire on the ground and while airborne;
 - iv) engine fire and failure;
 - v) effects of engine icing and anti-ice operation;
 - vi) take-off, landing and flight with the critical engine inoperative including driftdown and engine inoperative performance capabilities;
 - vii) on 3- and 4-engine aeroplanes inflight procedures including approach and landing with 2 engines inoperative (applies to P-I-C only);
 - viii) loss of pressurization and emergency descent (if applicable);
 - ix) flight control failures and abnormalities;

- x) hydraulic, electrical and other system failures;
 - xi) failure of navigation and communication equipment;
 - xii) pilot incapacitation - recognition and response during various phases of flight;
 - xiii) approach to the stall and recovery procedure with ground contact imminent and ground contact not a factor (clean, take-off and landing configuration);
 - xiv) buffet boundary onset, steep turns (45° of bank), and other flight characteristics such as unusual attitudes (as applicable for initial and upgrade only);
 - xv) aeroplane performance for climb, cruise, holding, descent and landing;
 - xvi) normal, noise abatement and performance limited take-offs;
 - xvii) take-off and landing data calculations;
 - xviii) rejected take-off procedures and rejected landings;
 - xix) passenger and crew evacuation;
 - xx) FMS, GPWS, TCAS and other specialized aeroplane equipment (where available); and
 - xxi) inadvertent encounters with moderate or severe in flight icing conditions.
- b) Where the air operator seeks authorization for flight in IMC the following training in flight planning and instrument flight procedures shall be included:
- i) departure, enroute, holding and arrival; and
 - ii) all types of instrument approaches and missed approaches in minimum visibility conditions using all levels of automation available (as applicable).
- c) In addition to the training in an approved Level A FFS Training Program, the following flight training on the aeroplane type shall be carried out:
- i) interior and exterior aeroplane preflight checks;
 - ii) ground handling for P-I-C;
 - iii) normal take-off, visual circuit (where possible) and landing;
 - iv) a simulated engine inoperative approach and landing;
 - v) simulated engine failure procedures during take-off and missed approach (at a safe altitude and airspeed);
 - vi) no electronic glide slope approach and landing; and

- vii) circling (if applicable) and other approaches where the simulator lacks the capability.
- d) If a Level A flight simulator has differences in performance, systems, or cockpit layout and configuration from the air operator's aeroplane, additional training on these differences shall be provided.

5. Level B Training Program (if applicable)

An air operator with an approved Level B training program using a Level B or better FFS, approved in accordance with the Aeroplane and Rotorcraft Simulator Manual, is permitted to conduct most initial, upgrade and recurrent training in that simulator. Additionally, flight training in an aeroplane must be carried out for general handling and landing manoeuvres for initial and upgrade training.

- a) The following training in standard operating procedures for normal, abnormal and emergency operation of the aeroplane systems and components shall be carried out in the FFS:
 - i) use of aeroplane checklists;
 - ii) flight and cabin crew co-operation, command and co-ordination;
 - iii) aeroplane and cargo fire on the ground and while airborne;
 - iv) engine fire and failure;
 - v) effects of engine icing and anti-ice operation;
 - vi) take-off, landing and flight with critical engine inoperative including driftdown and engine inoperative performance capabilities;
 - vii) on 3- and 4-engine aeroplanes inflight procedures including approach and landing with 2 engines inoperative (applies to P-I-C only);
 - viii) loss of pressurization and emergency descent (if applicable);
 - ix) flight control failures and abnormalities;
 - x) hydraulic, electrical and other system failures;
 - xi) failure of navigation and communication equipment;
 - xii) pilot incapacitation - recognition and response during various phases of flight;
 - xiii) recovery from turbulence and windshear on take-off and approach;
 - xiv) approach to the stall and recovery procedure with ground contact imminent and ground contact not a factor (in clean, take-off and landing configuration);

- xv) buffet onset boundary, steep turns (45° bank), and other flight characteristics such as unusual attitudes (as applicable for initial and upgrade only);
 - xvi) aeroplane performance for climb, cruise, descent and landing;
 - xvii) normal, noise abatement and performance limited take-offs;
 - xviii) take-off and landing data calculations;
 - xix) rejected take-off procedures and rejected landings;
 - xx) passenger and crew evacuation;
 - xxi) FMS, GPWS, TCAS and other specialized aeroplane equipment (as applicable); and
 - xxii) inadvertent encounters with moderate or severe in flight icing conditions.
- b) Where the air operator seeks authorization for flight in IMC, the following training in flight planning and instrument flight procedures shall be included:
- i) departure, enroute, holding and arrival; and
 - ii) all types of instrument approaches and missed approaches in minimum visibility conditions using all levels of automation available (as applicable).
- c) In addition to the training in an approved Level B Simulator Training Program, the following flight training on the aeroplane type shall be carried out:
- i) interior and exterior aircraft preflight checks;
 - ii) ground handling for the P-I-C;
 - iii) normal take-off, visual circuit (where possible) and landing;
 - iv) a simulated engine inoperative approach and landing;
 - v) simulated engine failure procedures during take-off and missed approach (at a safe altitude and airspeed);
 - vi) no electronic glide slope approach and landing; and
 - vii) circling (if applicable) and other approaches where the simulator lacks the capability.
- d) If a Level B flight simulator has differences in performance, systems, or cockpit layout and configuration from the air operator's aeroplane, additional training on these differences shall be provided.

6. Level C Training Program

TRANSPORT CANADA APPROVAL REQUIRED FOR LEVEL "C" TRAINING PROGRAMS

- a) An air operator with an approved Level C training program using an approved Level C FFS is permitted zero flight time training for candidates with at least second-in-command experience on a similar aeroplane with the same operator or has had verifiable line currency as a second-in-command on a similar aeroplane within the previous two years. Candidates who do not qualify shall undergo aeroplane flight training in accordance with those items listed in subparagraphs 725.124(9)(c)(i-iv) above.
- b) For the purpose of this provision, "similar aeroplane" means both aeroplanes are subject to the Canadian Aviation Regulations except where the two types have been grouped for PPC purposes as:
 - i) turbo-jet to turbo-jet - provided both are certified as Transport Category Aeroplanes;
 - ii) turbo-prop to turbo-prop - provided both are certified as Transport Category Aeroplanes; and/or
 - iii) reciprocating to reciprocating - provided both are certified for operations under the Canadian Aviation Regulations.
- c) In addition to those items of training required in paragraphs 723.98 (8)(a) and (b) above, the following training in an approved Level C flight simulator shall include:
 - i) manoeuvring of the aeroplane on the ground;
 - ii) crosswind take-offs and landings to 100% of the published crosswind component;
 - iii) a visual training program in the flight simulator to ensure VFR flight skills, covering scenarios of dusk and night with variable weather and visibilities. This program shall include the following:
 - A) normal and crosswind take-offs, visual circuits and landings with variable wind, runway illusion and surface conditions;
 - B) engine inoperative approach and landing;
 - C) engine failure procedures during take-off and missed approach;
 - D) no electronic glideslope approach and landing; and
 - E) approaches and landings with flight control failures and abnormalities.

- iv) a simulated line flight comprising at least 2 sectors (one as pilot flying and another as pilot not flying).
- d) If a Level C flight simulator has differences in performance, systems, or cockpit layout and configuration from the air operator's aeroplane, additional training on these differences shall be provided.

7. Level D Training Program

TRANSPORT CANADA APPROVAL REQUIRED FOR LEVEL "D" TRAINING PROGRAMS

- a) An air operator with an approved Level D training program using an approved Level D FFS is permitted zero flight time training.
- b) In addition to the training required for a Level C program, the following FFS training shall be carried out at an appropriate point in the training program.
 - i) A VFR training program in the Level D flight simulator of at least 4 hours per crew (2 hours as pilot flying and 2 hours of pilot not flying) is required, to ensure visual flight skills to cover either day or dusk and night with variable weather and visibility scenarios. This program shall include the following:
 - A) normal and crosswind take-offs, and visual circuits and landings, with variable wind, runway illusion and surface conditions;
 - B) engine inoperative approach and landing;
 - C) engine failure procedures during take-off and missed approach;
 - D) no visual aids approaches and landings; and
 - E) approaches and landings with flight control failures and abnormalities;
 - ii) Simulated line flights of at least 2 sessions (2 sectors as pilot flying and 2 sectors as pilot not flying) are required. Pilot flying duties shall be carried out from the appropriate seat.
- c) If a Level D flight simulator has differences in performance, systems, or cockpit layout and configuration from the air operator's aeroplane, additional training on these differences shall be provided.

8. Aeroplane Flight Training Program

Flight training time shall be "air time"

Programmed time allotted: **(select what is applicable for your Company)**

- Initial Training:
- Single-engine; three (3) hours
 - Single-engine Turbine IFR/ Cargo; three (3) hours
 - Single-engine Turbine IFR/PAX; two (2) hours plus six (6) hours simulator
 - Multi-engine 6 seats or less; three (3) hours
 - Multi-engine 7-9 seats; four (4) hours
- Annual Training:
- Single-engine; one (1) hour
 - Single-engine Turbine; one (1) hour

 - Multi-engine 6 seats or less; 1.5 hours
 - Multi-engine 7-9 seats; 1.5 hours

Any simulated failures of aeroplane systems shall only take place under operating conditions which do not jeopardize safety of flight. Only flight crew essential to the training shall be carried on board during a training flight.

- a) Standard Operating Procedures for normal, abnormal and emergency operation of the aeroplane systems and components including:
- i) use of aeroplane checklists including interior and exterior pre-flight checks;
 - ii) manoeuvring of the aeroplane on the ground;
 - iii) aspects of flight and cabin crew co-operation, command and co-ordination;
 - iv) normal take-off, visual circuit, approach and landing;
 - v) simulated aeroplane and cargo fire on the ground and while airborne;
 - vi) simulated engine fire and failure;
 - vii) briefings on effects of airframe and engine icing and anti-ice operation;

- viii) take-off, landing and flight with the critical engine simulated inoperative, including driftdown and engine inoperative performance capabilities;
 - ix) on 3- and 4-engine aeroplanes inflight procedures including approach and landing with 2 engines simulated inoperative (applies to P-I-C only);
 - x) simulated loss of pressurization and emergency descent;
 - xi) no electronic glide slope approach and landing;
 - xii) simulated hydraulic, electrical and other system failures;
 - xiii) simulated flight control failures and abnormalities;
 - xiv) simulated failure of navigation and communication equipment;
 - xv) simulated pilot incapacitation - recognition and response;
 - xvi) briefing on recovery from turbulence and windshear on take-off and approach;
 - xvii) approach to the stall and recovery procedure simulating ground contact imminent and ground contact not a factor (clean, take-off and landing configuration);
 - xviii) buffet onset boundary, steep turns (45° of bank) and other flight characteristics (as applicable for initial and upgrade only);
 - xix) aeroplane performance for climb, cruise, holding, descent and landing;
 - xx) normal and performance limited take-offs;
 - xxi) crosswind take-off and landing, and briefing on contaminated runway take-off and landing;
 - xxii) take-off and landing data calculations;
 - xxiii) simulated rejected take-off procedures (at or below 60 kts) and rejected landings;
 - xxiv) briefing on crew and passenger evacuation procedures; and
 - xxv) other specialized aeroplane equipment (where applicable).
- b) Flight planning and instrument flight procedures where the air operator is authorized for VFR flight at night or flight in IMC:
- i) departure, enroute, holding and arrival; and
 - ii) all types of instrument approaches and missed approaches in simulated minimum visibility conditions, including circling approaches (where applicable) using all levels of automation available (as applicable).

9. Emergency Procedures Training for Pilots

Programmed time allotted: Initial and every three (3) years: Two (2) hours
Annual: One (1) hour

This training is required on an annual basis and shall include instruction in the location and operation of all emergency equipment. Training devices approved to simulate flight operating emergency conditions, static aeroplanes, ground demonstrations, classroom lectures, films or other devices may be used for training provided the method used ensures that each flight crew member is adequately trained in the operation or use of all emergency equipment.

- a) aeroplane fire in the air and on the ground;
- b) use of fire extinguishers including practical training;
- c) operation and use of emergency exits including practical training;
- d) passenger preparation for an emergency landing or ditching (as applicable) including practical training;
- e) emergency evacuation procedures including practical training;
- f) donning and inflation of life preservers (when equipped) including practical training;
- g) removal from stowage, deployment, inflation and boarding of life rafts/slide rafts (when equipped) including practical training;
- h) pilot incapacitation including practical training;
- i) hijacking, bomb threat and other security procedures;
- j) passenger on board medical emergency; and
- k) special emergency procedures when the aeroplane is used on MEDEVAC operations including patient evacuation in emergency situations.

10. Regaining Qualifications Training

For operators using a Level B, C, D FFS approved in accordance with the Aeroplane and Rotorcraft Simulator Manual, or the aeroplane, the following must be completed for all pilots who have not maintained their recency qualifications in accordance with paragraph 703.88 (1)(b) of the Canadian Aviation Regulations for a period between 90 and 180 days.

- a) a briefing on changes that have occurred to the aeroplane or its operation since the last flight; and
- b) three take-offs and landings (which may be carried out as part of a PPC where one has come due).

11. Regaining Qualifications after PPC Expiry

- a) Where the PPC has expired for less than 6 months the following must be completed to regain type qualification:
 - i) all the requirements specified by subsection (12) above; and
 - ii) any recurrent training, including a PPC, which may have come due during the absence from flying duties.
- b) Where the PPC has expired from between 6 and 24 months the following must be completed to regain type qualification:
 - i) all the requirements of paragraph (13)(a) above; and
 - ii) a technical ground training course consisting of an aeroplane system review and FTD training (where applicable).
- c) Where the PPC has expired for a period greater than 24 months a complete initial aeroplane type training course shall be carried out.

12. Right Seat Conversion Training

For a left seat-qualified pilot to operate an aeroplane from the right seat, the following shall apply:

- a) be qualified and current on the aeroplane type for left seat duties;
- b) receive sufficient technical ground training on right seat duties; and
- c) annually, receive sufficient flight or FFS training to enable a Company Check Pilot, air operator aeroplane type Chief Pilot or aeroplane type Training Pilot to certify the competency of the pilot to carry out pilot duties from the right seat.

13. Upgrade Training and Checking

- a) Upgrade training and checking for pilots who are qualified as a second-in-command on that aeroplane type shall include the following:
 - i) successfully complete training as a pilot-in-command in all areas of aeroplane handling and operation as outlined in the air operator's approved initial course;
 - ii) command and decision making;
 - iii) successfully complete specialized operations qualification training (e.g. lower take-off limits etc.); and

- iv) successfully complete on that type of aeroplane the initial pilot proficiency check outlined in Schedule I or Schedule II, conducted by a Transport Canada inspector or an approved Company Check Pilot.
- b) Upgrade training and checking for pilots whose PPC as second-in-command on that aeroplane type has expired within the previous 24 months shall consist of a briefing on changes that have occurred to the aeroplane or its operation since the last flight; and three take-offs and landings (which may be carried out as part of a PPC where one has come due).
- c) Pilots who have not held a valid PPC on that aeroplane type as second-in-command for a period greater than 24 months shall be given a complete initial aeroplane type training course as well as the requirements of paragraph (a) above.

14. Flight Follower Training

Programmed time allotted: Four (4) hours

An approved initial and annual recurrent training program is required for company personnel responsible for flight following of company aeroplanes. The training program shall consist of:

- a) duties and responsibilities;
- b) communication procedures;
- c) applicable regulations and standards;
- d) flight preparation procedures as applicable to assigned duties;
- e) procedures in the event of an emergency or overdue aircraft;
- f) accident and incident reporting procedures; and
- g) requirements of approved Company Operations Manual as applicable to the duties and responsibilities.

15. Aeroplane Surface Contamination Training

Programmed time allotted: One(1) hours

An approved surface contamination initial and recurrent training program is required for all operations personnel to ensure they are aware of the hazards and procedures for ice, frost and snow critical contamination on aircraft. The training program shall include:

- a) responsibility of pilot-in-command and other operations personnel;
- b) regulations related to operations in icing condition;
- c) weather conducive to ice, frost and snow contamination;
- d) inspection before flight and removal of contamination;
- e) in-flight icing recognition; and
- f) hazards related to critical surface contamination of ice, frost and snow.

16. Minimum Equipment List Training (MEL)

Programmed time allotted: One (1) hours

When an MEL has been approved for use on an aeroplane type the air operator shall provide the following training to crew members, maintenance personnel and to any persons exercising operational control as applicable:

- a) Training for maintenance personnel shall include instruction on those sections of the MCM which deal with the MEL, placarding of inoperative equipment, maintenance release of an aeroplane, dispatching, and any other MEL related procedures;
- b) Training for pilots and operational control personnel shall include instruction on purpose and use of an MEL, air operator MEL procedures, elementary maintenance procedures as applicable and responsibility of the pilot-in-command; and
- c) Recurrent training shall be conducted annually to ensure air operator personnel are aware of any changes to the MEL or MEL procedures.

17. Transportation of Dangerous Goods

All training required by the Transportation of Dangerous Goods Regulations.
(see section 8 - subsection 8.4. and 8.5 of this manual)

18. Take-off Minima Reported Visibility RVR 1200 feet (1/4 mile)

Programmed time allotted: One (1) hours

Training is required for the pilot-in-command only, except, if the air operator authorizes in the Company Operations Manual, the second-in-command to conduct take-offs in lower than standard weather minima, the second-in-command shall undergo the same training as the pilot-in-command.

- a) Ground Training
 - i) take-off alternate requirements;
 - ii) pilot-in-command minimum experience;
 - iii) pilot-in-command responsibility for visibility and obstacle clearance requirements;
 - iv) minimum aeroplane and runway equipment requirements; and
 - v) procedures to ensure compliance with performance limitations.
- b) Synthetic Training Device Training RVR 1200-Aircraft without Certified Take-off Performance

During initial and annual recurrent training:

 - i) a minimum of one take-off at RVR 1200 feet with failure of the critical engine shortly after lift-off; and
 - ii) a minimum of one rejected take-off at RVR 1200 feet at a speed approaching rotation.

19. Area Navigation Systems (RNAV)(GPS)

Programmed time allotted: Two (2) hours.

- a) General Training
 - i) To qualify for use of RNAV systems on IFR operations, an air operator shall have an approved flight crew training and qualifications program for use of the system. Flight crew shall have completed the appropriate training and have completed an in-flight check or an equivalent check in an approved synthetic training device. This qualification check shall be conducted by an approved check pilot.
 - ii) Training shall be in the following areas:
 - A) pre-flight;
 - B) normal operation of the system;
 - C) procedures for manually updating system;
 - D) methods of monitoring and cross checking system;(E) operation in area of compass unreliability;
 - E) malfunction procedures;
 - F) terminal procedures;
 - G) waypoint symbology, plotting procedures, record keeping duties/practices; and
 - H) post flight.

- iii) To qualify for approval to conduct GPS approaches in IFR, an air operator shall have a flight crew training program approved by the Minister. Flight crew shall have completed the appropriate ground and flight training and have completed an in-flight check, or an equivalent check in a synthetic training device approved by the Minister prior to conducting GPS approaches. This qualification check shall be conducted by an approved check pilot.
 - iv) Where pilots are required to use more than one type of GPS for approach, an air operator shall ensure the training program addresses the differences between the units, unless the units have been determined by the Minister to be sufficiently similar.
 - v) An air operator shall ensure the ground training includes "hands on" training using a desk top simulator, a computer based simulation of the unit to be used, a static in-aircraft unit, or other ground training devices acceptable to the Minister.
- b) Ground Training - Non-Integrated Receivers (Panel Mount GPS Receivers)

An air operator shall ensure that the training program candidates are trained to proficiency in each of the elements associated with the following areas:

- i) Knowledge with the respect to the following:
 - A) the GPS system, including:
 - I) GPS system components and aircraft equipment;
 - II) the composition of satellite constellation;
 - III) the minimum number of satellites required for 2-D and 3-D navigation;
 - IV) the basic concept of satellite ranging;
 - V) factors affecting the accuracy of GPS signals;
 - VI) the World Geodetic Survey 84 (WGS 84) datum and the effect of using any other datum;
 - B) human factors applicable to the use of GPS and how errors may be reduced or eliminated;
 - C) company standard operating procedures for using GPS units; and
 - D) procedures for reporting GPS problems and database errors.

- ii) Ability to perform the following operational tasks:
 - A) select appropriate operational modes;
 - B) recall categories of information contained in the database;
 - C) predict RAIM availability;
 - D) enter and verify user defined waypoints;
 - E) recall and verify database waypoints;
 - F) interpret typical GPS navigational displays including latitude/longitude, distance and bearing to waypoint, course deviation indication (CDI), desired track (DTK), track made good (TMG), actual track (TK), cross track error and any other information appropriate for the equipment used;
 - G) intercept and maintain GPS defined tracks;
 - H) determine navigation information appropriate for the conduct of the flight including ground speed (GS), estimated time of arrival (ETA) for next waypoint and destination;
 - I) recognition of waypoint passage;
 - J) use of 'direct to' function;
 - K) link enroute portion of GPS flight plan to approach;
 - L) conduct SIDs, STARs, terminal area procedures and holds;
 - M) retrieve, verify and conduct GPS stand alone approaches; and
 - N) conduct GPS missed approaches.
- iii) Ability to conduct the following operational and serviceability checks:
 - A) database currency and area of operation;
 - B) receiver serviceability;
 - C) RAIM status;
 - D) CDI sensitivity;
 - E) position indication; and
 - F) number of satellites acquired and, if available, satellite position information.
- iv) Ability to recognize and take appropriate action for all GPS warnings and messages including, where applicable:

- A) "loss of RAIM"
 - B) "2D navigation"
 - C) "In Dead Reckoning Mode"
 - D) "database out of date"
 - E) "GPS fail"
 - F) "barometric input fail"
 - G) "power/battery low" or "fail"
 - H) "parallel offset on"; and
 - I) "satellite fail".
- c) Ground Training - Integrated Receivers (Flight Management Systems)
- An air operator shall ensure that the training program candidates are trained to proficiency in each of the elements associated with the following areas:
- i) Knowledge with the respect to the following:
 - A) the GPS system and theory of operation, including:
 - I) GPS system components and aircraft equipment;
 - II) the composition of satellite constellation;
 - III) the minimum number of satellites required for 2-D and 3-D navigation;
 - IV) the basic concept of satellite ranging;
 - V) factors affecting the accuracy of GPS signals; and
 - VI) the WGS84 datum and the effect of using any other datum; and
 - B) human factors applicable to the use of GPS and how errors may be reduced or eliminated (i.e. maintaining situational awareness); and
 - ii) Ability to perform the following operational tasks:
 - A) predict RAIM availability;
 - B) link enroute portion of GPS flight plan to approach;
 - C) conduct GPS stand alone approaches; and
 - D) conduct GPS missed approaches.
 - iii) Ability to conduct the following operational and serviceability checks:
 - A) RAIM status;
 - B) CDI sensitivity; and

- C) number of satellites acquired and, if available, satellite position I information.
- iv) Ability to recognize and take appropriate action for all GPS warnings and messages including, where applicable:
 - A) "loss of RAIM";
 - B) "2D navigation";
 - C) "GPS fail";
 - D) "barometric input fail"; and
 - E) "satellite fail".
- d) Flight Training
 - i) Pilots shall complete flight training in the use of GPS for approach and other associated duties for each crew position they are authorized to occupy. Flight training may be completed in an aircraft, or in a level A or higher simulator that is equipped with the same model of GPS receiver (or a model determined by the Minister to be sufficiently similar) that is installed in the company aircraft.
 - ii) Flight training shall be conducted by a designated training pilot who has completed the company ground training program approved by the Minister, and demonstrated proficiency in the use of the model of GPS (or a model determined by the Minister to be sufficiently similar), or to an approved check pilot.

20. Transportability of Pilot Proficiency Check or Competency Check

Transportability of Pilot Proficiency Checks or Competency Checks from one air operator to another is permitted subject to the hiring air operator providing the following training which shall be specified in the approved operations/training manual:

- a) company indoctrination;
- b) pilot ground and emergency procedures training on each type of aeroplane the pilot is assigned, sufficient to cover the air operator procedures and equipment differences;
- c) standard operating procedures review; and
- d) the hiring air operator records the PPC/PCC validity and expiration date in company records.

21. High Altitude Training

Programmed time allotted: One (1) hours

High Altitude training is required for all flight crew members operating aeroplanes above 13,000 feet ASL before the first assignment on a pressurized aeroplane and every three years thereafter:

- a) physiological phenomena in a low pressure environment, including:
 - i) respiration;
 - ii) hypoxia;
 - iii) duration of consciousness at altitude without supplemental oxygen; and
 - iv) gas expansion and gas bubble formation.
- b) other factors associated with rapid loss of pressurization including:
 - i) most likely causes;
 - ii) noise;
 - iii) cabin temperature change;
 - iv) cabin fogging;
 - v) effects on objects located near the point of fuselage failure; and
 - vi) actions of crew members immediately following the event and the likely resultant attitude.

22. Single-engine Aeroplanes Carrying Passengers VFR at Night or Under IFR

Programmed time allotted: One (1) hours

The following training is required:

- a) initial training in an approved synthetic training device, including all emergency procedures that cannot be safely practised in the aeroplane;
- b) training in the aeroplane in accordance with the following training requirements:

Training Requirements

INITIAL			RECURRENT		
Ground	Aeroplane	Simulator	Ground	Aeroplane	Simulator
20.0	2.0	6.0	7.5	1.0	N/R
1. Ground training times do not include self-study or examination times. 2. Written exams are mandatory at completion of both Initial and Recurrent Ground Training. 3. Synthetic training device and Aeroplane times are Pilot Flying (PF) times only.					

- c) Required Synthetic Training Device Exercises
- i) use of checklists
 - ii) aeroplane fire on ground or while airborne
 - iii) engine fire on ground and in flight
 - iv) engine failure in flight
 - v) inadvertent encounter with airframe icing conditions and operation of de-icing and anti-icing equipment
 - vi) hydraulic, electrical, and other system malfunctions (as applicable)
 - vii) loss of pressurization and emergency descent, (if applicable)
 - viii) recognition and recovery from turbulence and windshear on approach and landing
 - ix) rejected take-offs and landings
 - x) missed approach and go-around
 - xi) straight-in and circling approaches, with emphasis on non-precision procedures.

23. Survival Equipment Training

Programmed time allotted: One (1) hours

Training for all crew members shall include the following:

- a) survival concepts;
- b) contents of survival equipment kit; and
- c) how to use the survival equipment carried on board as appropriate for the operation.

24. Aeroplane Servicing and Ground Handling Training for Pilots

Programmed time allotted: One (1) hours

- a) fuelling procedures:
 - i) types of fuel, oil and fluids used in the aeroplane;
 - ii) correct fuelling procedures; and
 - iii) procedures for checking fuel, oil and fluids and proper securing of caps.
- b) use of tow bars and maximum nose wheel deflection when towing;
- c) seasonal use of the parking brake;
- d) installation of protective covers on the aeroplane; and
- e) procedures for operating in cold weather such as:
 - i) moving the aeroplane out of a warm hangar when precipitation is present;
 - ii) procedures for applying de-icing and anti-icing fluids for the aeroplane type including critical flight controls post application inspections; and
 - iii) engine and cabin pre-heating procedures, including proper use of related equipment

25. Training Program - Minimum Flight Training Times (Aeroplanes)

- a) In Tables I and II,
 - i) the term "flight training time" means "flight time";
 - ii) the terms "Level A", "Level B" and "Level C" refer to the approved training program, not to the certification level of the simulator used.
- b) Pilots will receive some PNF time in the simulator in addition to the PF times given in these tables.

TABLE I

MINIMUM INITIAL FLIGHT TRAINING TIME	GROUND TRAINING			FLIGHT TRAINING SIMULATOR AND AIRCRAFT (PF – PILOT FLYING)					AIRCRAFT ONLY
	Basic	Pressurized	Turbine	Level A ¹	Level B ¹	Level C	Level D	A/C ²	
Single Engine	5.5	.5	.5						3.0
S-E (Turbine) IFR/Cargo	16.0								3.0
S-E (Turbine) IFR/PAX	20.0			6.0				2.0	
Multi-Engine 6* or Less	7.5	4.0	4.0						3.0
Multi-Engine 7* to 9*	12.0	4.0	4.0	7.5	7.5	10.0		1.5	4.0
M/Engine 10* to 19*++	16.0	4.0	4.0	8.0	8.0	10.0	10.0	2.0	5.0
M/E Piston 20+*++	18.0	2.0							6.0
M/E Turbine 20+*++	45.0			10.0	10.0	12.0	12.0	2.0	8.0
<p>* Denotes the number of passenger seats for which the aircraft was certificated. ++ Included since operators may choose to operate under 703 configured for nine or fewer seats. (e.g., Twin Otter) ¹ Training on Aircraft required ² The minimum aircraft training required</p>									

TABLE II

MINIMUM RECURRENT FLIGHT TRAINING TIME (ANNUAL)	GROUND TRAINING			FLIGHT TRAINING SIMULATOR AND AIRCRAFT (PF – PILOT FLYING)					AIRCRAFT ONLY
	Basic	Pressurized	Turbine	Level A ¹	Level B	Level C	Level D	A/C ¹	
Single Engine	2.5	.5	.5						1.0
S-E (Turbine) IFR/Cargo	7.5								1.0
S-E (Turbine) IFR/PAX	7.5								1.0
Multi-Engine 6* or Less	5.0	.5	.5						1.5
Multi-Engine 7* to 9*	5.0	.5	.5	4.0	4.0	4.0		1.0	1.5
M/Engine 10* to 19*++	7.0	.5	.5	4.0	4.0	4.0	4.0	1.0	2.0
M/E Piston 20+*++	7.5	0							3.0
M/E Turbine 20+*++	20+			4.0	4.0	4.0	4.0	1.0	3.0

* Denotes the number of passenger seats for which the aircraft was certificated.
++ Included since operators may choose to operate under 703 configured for nine or fewer seats. (e.g., Twin Otter)
¹ Amount of Additional training required on aircraft if operator does not have an approved Level A or higher training program authorizing recurrent training on a full flight simulator.

26. Airborne Icing

Programmed time allotted: One (1) hours

Approved initial and recurrent training programs for all flight crew shall include airborne icing training to ensure a full awareness of the hazards caused by airborne icing conditions and the operating procedures necessary to avoid and exit hazardous icing conditions. The training program shall include:

- a) the basis for aeroplane certification for flight into known icing conditions;
- b) airborne icing definitions and terminology;
- c) aerodynamic effects of airborne icing;
- d) airborne icing weather patterns, including both classical and non-classical mechanisms for freezing precipitation;
- e) flight planning and in flight icing information;

- f) information specific to aircraft fleet concerning operation de- and anti-ice equipment, and operational procedures; and
- g) company directives concerning operations in airborne icing contained in COMs, SOPs, and other company documents.

27. Controlled Flight into Terrain (CFIT) Avoidance Training

Programmed time allotted: One (1) hours

Subject to paragraph D, air operators who hold AOCs authorizing operations under IFR or NVFR shall provide the following CFIT avoidance training to all flight crew members operating aircraft under IFR or NVFR:

- a) initial and biennial ground training:
 - i) factors that may lead to CFIT accidents and incidents,
 - ii) operational characteristics, capabilities, and limitations of GPWS (if applicable),
 - iii) CFIT prevention strategies,
 - iv) methods of improving situational awareness, and
 - v) escape manoeuvre techniques and profiles applicable to the aeroplane type;
- b) air operators with GPWS equipment using synthetic training devices in their approved initial training program shall conduct CFIT avoidance training as follows:
 - i) one escape manoeuvre performed in VMC in response to a GPWS warning, and
 - ii) one escape manoeuvre performed in IMC in response to a GPWS warning;
- c) air operators with GPWS equipment using synthetic training devices in their approved recurrent training program shall conduct CFIT avoidance training biennially as follows:
 - i) one escape manoeuvre performed in VMC in response to a GPWS warning where the air operator is approved for VFR only operations, or
 - ii) one escape manoeuvre performed in IMC in response to a GPWS warning where the air operator is approved for IFR operations;
- d) where the flight crew members operate aircraft equipped with a Terrain Awareness and Warning System (TAWS), the training provided on TAWS is considered to have met the requirements of paragraphs a, b and c.

28. Safety Management Systems Training

Programmed time allotted: One (1) hours

Transport Canada is presently developing Safety Management System training.

29. Airline Transport Pilot Training – Pilot In Command Under Supervision Training

1. Air operators using small aeroplanes may institute a program of supervision to allow co-pilots to credit flight time as pilot-in-command time provided that they have received authorization to do so from the Minister based on the operator's ability to institute such a program in a safe and effective manner.
2. The training program shall be conducted in accordance with the following:
 - a) the operator shall ensure that the supervisory pilots are briefed on these procedures by the Minister; and
 - b) the pilot-in-command under supervision flight time may be acquired in the co-pilot's seat provided the pilot-in-command functions described in clauses (i) and (ii) can be performed from the seat. Otherwise, the pilot-in-command under supervision flight time shall include a minimum of ten hours in the pilot-in-command seat. The pilot-in-command under supervision flight time shall include:
 - i) with the exception of taxiing, at least all the flight functions of a pilot-in-command including flight planning, takeoff, landing, en route flying and approach; and
 - ii) a minimum of one takeoff and one landing for each ten hours of flight time.
3. The conditions for crediting an applicant's flight time are as follows:
 - a) An applicant for an Airline Transport Pilot Licence - Aeroplane shall be given credit for up to 100 hours of pilot-in-command flight time under supervision, provided the applicant:
 - i) holds a Commercial Pilot Licence - Aeroplane with a multi-engine rating and the aeroplane type rating in which the flight time is acquired;
 - ii) has a Group I instrument rating; and
 - iii) has accumulated a minimum of 150 hours pilot-in-command flight time in aeroplanes.

NOTE: An applicant undergoing pilot in command under supervision training may be credited not more than 50% pilot in command under supervision flight time towards the required for the issuance of a higher class of pilot licence. ie) 200 hours Pilot-In-Command under supervision equals 100 hours Pilot In Command.

4. An applicant shall be credited flight time as follows:
 - a) not more than 50% of the pilot-in-command under supervision flight time for a total of up to 100 hours in the case of an Airline Transport Pilot Licence – Aeroplane; and
 - b) Pilot-in-command under supervision flight time, provided such flight time is acquired within the 12 months preceding the date of application for the licence for which the flight time is to be credited.
5. When an application for an Airline Transport Pilot Licence is based in part on pilot-in-command under supervision flight time, the applicant shall:
 - a) submit a personal log or other reliable record that contains a summary of the pilot-in-command under supervision flight time and the number of takeoffs and landings; and
 - b) enter a notation on the application form showing the portion of pilot-in-command flight time that was done under supervision.
6. Air operators that choose to develop a pilot-in-command under supervision form should include it in section 7 of this manual.

ANNEX – B: Sample Personnel Training Requirements Overview

Flight Crew	Applicability		Min Training Times	
	Initial	Annual	Initial	Annual
Course Name				
Company Indoctrination	X	N/A	4.0 hr	N/A
Survival Equipment	X	N/A	1.0 hr	1.0 hr
A/C Surface Contamination	X	X	1.0 hr	1.0 hr
Airborne Icing Training	X	X	1.0 hr	1.0 hr
Dangerous Goods	X	X	2.0 hr	1.0 hr
Minimum Equipment List (MEL)	X	N/A	1.0 hr	N/A
High Altitude Indoctrination	X	N/A	1.0 hr	N/A
Area Navigation (RNAV) (GPS)	X	N/A	2.0 hr	N/A
Safety Management Systems	X	X	1.0 hr	1.0 hr
Controlled Flight Into Terrain	X	X	1.0 hr	1.0 hr
Specific Type Training				
Aircraft Technical Ground Training	X	X	35.0 hr	12.0 hr
Aircraft Emergency Procedures	X	X	3.0 hr	1.5 hr
Aircraft Servicing & Ground Handling	X	X	2.0 hr	
Aircraft Flight Training	X	X	8.0 hr	3.0 hr
Aircraft Line Indoctrination (Initial)	X		25.0 hr	
Aircraft Line Indoctrination (Transition)	X		25.0 hr	
Aircraft RVR 1200 Training	X	X		
Aircraft Upgrade Training	X			
Aircraft Right Seat Conversion Training	X			
Other Operations Personnel				
Surface Contamination Trng Maintenance/Ground Personnel	X	X		
Flight Follower (if applicable)	X			
Minimum Equipment List (MEL)	X			

ANNEX – C: Commercial and Business Aviation Advisory Circular
<Insert most recent Commercial and Business Aviation Advisory Circular>

CHAPTER

7

<Insert Company
Name>

Chapter 7: Company Forms

Chapter 7

7.1 Company Forms

Guidance: Included in this section are the following forms:

- a) Operational Flight Plan;
- b) Extension to Maximum Flight Duty Time Due to Unforeseeable Operational Circumstances;
- c) Flight & Duty Time Record.
- d) Training Record Summary.
- e) Pilot Competency Check.
- f) Initial and Recurrent Pilot Training

NOTE: Due to the many different types of aeroplanes used by Commuter Air Operators, it is not possible for Transport Canada to design generic weight & balance or training record forms that would be usable by most operators.

It is recommended that each operator design their own record forms or amend those currently in use to reflect the requirements of the Canadian Aviation Regulations.

7.2 Example Abbreviated Operational Flight Plan
 <Insert Company Name> Operational Flight Plan

INSERT COMPANY NAME OPERATIONAL FLIGHT PLAN													
FLIGHT #:								DATE:					
PIC:													
CO-PILOT:													
AIRCRAFT TYPE:								REGISTION C:					
TO	ROUTE	MEA	TRACK	DIST	WIND	TAS	G/S	TIME	ETA	ATA	FUEL BURN		

TOTAL PERSONS ON BOARD: _____ TOTAL TIME: _____

FUEL TAXI & TO					FLIGHT			
FUEL TO DESTINATION					PLACE			
RESERVE					TIME OFF			
TOTAL FUEL REQUIRED					TIME DOWN			
AEROPLANE WEIGHT					AIR TIME			
CARGO/PAX WEIGHT					FLIGHT TIME			
ZERO FUEL WEIGHT (WT)								
FUEL ON BOARD WT								
PLANNED TAKE-OFF WT								
WEATHER								
I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS CORRECT & THAT THE WEIGHT AND BALANCE CONFIGURATION IS WITHIN LIMITS.								
Pilot-in-Command								

7.3 <Insert Company Name> Operational Flight Plan

INSERT COMPANY NAME OPERATIONAL FLIGHT PLAN											
FLIGHT #:								DATE:			
PIC:											
CO-PILOT:											
AEROPLANE MAKE & MODEL:								REGISTION C:			
TO	ROUTE	MEA	TRACK	DIST	WIND/TEMP	TAS	G/S	TIME	ETA	ATA	FUEL BURN

TOTAL PERSONS ON BOARD: _____ TOTAL TIME: _____

FUEL TAXI & TO				FLIGHT
FUEL TO DESTINATION				PLACE
RESERVE				TIME OFF
TOTAL FUEL REQUIRED				TIME DOWN
AEROPLANE WEIGHT				AIR TIME
CARGO/PAX WEIGHT				FLIGHT TIME
ZERO FUEL WEIGHT (WT)				
FUEL ON BOARD WT				
PLANNED TAKE-OFF WT				

PASSENGER MANIFEST			
1.		5.	
2.		6.	
3.		7.	
4.		8.	

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS CORRECT & THAT THE WEIGHT AND BALANCE CONFIGURATION IS WITHIN LIMITS.

Pilot-in-Command

7.4 Example Extension to Maximum Flight Duty Time

COMMUTER AIR COMPANY EXTENSION TO MAXIMUM FLIGHT DUTY TIME DUE TO UNFORESEEABLE OPERATIONAL CIRCUMSTANCES	
AIR OPERATOR: _____	
AIRCRAFT TYPE: _____	
DATE: _____	
PILOT: _____	
PLANNED REPORT TIME: _____	PANNED FINISH TIME: _____
PLANNED FLIGHT DUTY TIME: _____	
ACTUAL REPORT TIME: _____	ACTUAL FINISH TIME: _____
ACTUAL FLIGHT DUTY TIME: _____	
DESCRIPTION OF EVENTS:	
_____ PIC'S SIGNATURE	_____ DATE
AIR OPERATORS COMMENTS:	
_____ OPERATIONS MANAGER	_____ DATE
TRANSPORT CANADA COMMENTS:	
DATE: _____	AIR OPERATOR FILE #: _____

7.5 <Insert Company Name> – Example Flight Time/Duty Time/Rest Period

PILOT NAME: _____

MONTH/YEAR _____

DATE	DAILY	FLIGHT TIME						DUTY TIME			REST PERIOD			
		Total Previous 11 months	max 60 hours	max 120 hours	max 300 hours		max 14 hr			minimum 3 days off		minimum 13 days off		
		Last 7	Last 30	Last 90		Start	Finish	Hr	Day off	Last 30		Last 90		
	/	1	1	1						1		1		
	/	2	2	2						2		2		
	/	3	3	3						3		3		
	/	4	4	4						4		4		
	/	5	5	5						5		5		
	/	6	6	6						6		6		
	/	7	7	7						7		7		
	/	1	8	8						8		8		
	/	2	9	9						9		9		
	/	3	10	10						10		10		
	/	4	11	11						11		11		
	/	5	12	12						12		12		
	/	6	13	13						13		13		
	/	7	14	14						14		14		
	/	1	15	15						15		15		
	/	2	16	16						16		16		
	/	3	17	17						17		17		
	/	4	18	18						18		18		
	/	5	19	19						19		19		
	/	6	20	20						20		20		
	/	7	21	21						21		21		
	/	1	22	22						22		22		
	/	2	23	23						23		23		
	/	3	24	24						24		24		
	/	4	25	25						25		25		
	/	5	26	26						26		26		
	/	6	27	27						27		27		
	/	7	28	28						28		28		
	/	1	29	29						29		29		
	/	2	30	30						30		30		
	/	3	1	31						1		31		
Month Total	/													
Previous 12 months Total														

7.6 <Insert Company Name> – Flight Time/Duty Time/Rest Period Record

PILOT NAME: _____

MONTH/YEAR _____

DATE	DAILY	FLIGHT TIME						DUTY TIME			REST PERIOD			
		Total Previous 11 months	max 60 hours	max 120 hours	max 300 hours		max 14 hr			minimum 3 days off		minimum 13 days off		
		Last 7	Last 30	Last 90		Start	Finish	Hr	Day off	Last 30	Last 90			
	/	1	1	1	1					1	1			
	/	2	2	2	2					2	2			
	/	3	3	3	3					3	3			
	/	4	4	4	4					4	4			
	/	5	5	5	5					5	5			
	/	6	6	6	6					6	6			
	/	7	7	7	7					7	7			
	/	1	8	8	8					8	8			
	/	2	9	9	9					9	9			
	/	3	10	10	10					10	10			
	/	4	11	11	11					11	11			
	/	5	12	12	12					12	12			
	/	6	13	13	13					13	13			
	/	7	14	14	14					14	14			
	/	1	15	15	15					15	15			
	/	2	16	16	16					16	16			
	/	3	17	17	17					17	17			
	/	4	18	18	18					18	18			
	/	5	19	19	19					19	19			
	/	6	20	20	20					20	20			
	/	7	21	21	21					21	21			
	/	1	22	22	22					22	22			
	/	2	23	23	23					23	23			
	/	3	24	24	24					24	24			
	/	4	25	25	25					25	25			
	/	5	26	26	26					26	26			
	/	6	27	27	27					27	27			
	/	7	28	28	28					28	28			
	/	1	29	29	29					29	29			
	/	2	30	30	30					30	30			
	/	3	1	31	31					1	31			
Month Total	/													
Previous 12 months Total														

7.7 <Insert Company Name> Training Records Summary

FLT. TRAINING		PPC/PCC	GROUND TRAINING DATES AND EXAMS COMPLETED									REMARKS
TIME	DATE	DATE	COMPANY INDOC-TRAINING	SURFACE CONTAMINATION	AIRBORNE ICING	AIRCRAFT SERVICING & GROUND HANDLING	EMERG. PROC. TRAINING	AERO-PLANE TECHNICAL	CFIT	RNAV	DANGEROUS GOODS	

NOTE: This example form need not be used by your company. You may develop your own individual form and include it here.

7.8 <Insert Company Name> Pilot Competency Check

PILOT COMPETENCY CHECK	
Pilot: _____	License No: _____ Date: _____
Instrument Rating Valid to: _____	Medical Valid to: _____
Aircraft Type: _____	
Registration: _____	
Air Time: _____	
Flight Time: _____	
EXERCISES & MANEUVERS	
Pre-Flight	Take-Off
Wx Briefing _____	Normal _____
Flight Planning _____	X-wind _____
External Check _____	Rejected _____
Pre-Start _____	Departure Procedure _____
Cockpit Checks _____	
Radio Work _____	
Taxing _____	
After T/O _____	
Approach & Landing	Air Work
Normal Approach _____	IF Departure _____
Flapless Approach _____	Holding (NDB/VOR) _____
X-Wing Landing _____	IF Approaches _____
Overshoot _____	- NDB _____
	- VOR _____
	- ILS _____
	Engine Out _____
	Circling Approach _____
	Stalls _____
	Steep Turns _____
	SE Overshoot _____

PILOT COMPETENCY CHECK	
Emergencies	Others
Engine Fall-Cruise _____	
Engine Fire Ground _____	
Engine Fire Air _____	
Electrical Fire _____	Technical Knowledge
Electrical Failure _____	Engine Limits _____
Flap Asymmetry _____	Air Speeds _____
L/G Fail To Extend _____	Systems _____
	-
	-
	-
	Weight and Balance
Comments:	

Pilot Competent to Conduct Assigned Duties	
Check Pilot: _____	
License No: _____	

7.9 <Insert Company Name> Initial and Rucurrent Pilot Training

INITIAL AND RECURRENT PILOT TRAINING	
Pilot: _____	License No: _____ Date: _____
Instrument Rating Valid to: _____	Medical Valid to: _____
Aircraft Type: _____	
Registration: _____	
Air Time: _____	
Flight Time: _____	
EXERCISES & MANEUVERS	
Pre-Flight	Take-Off
Wx Briefing _____	Normal _____
Flight Planning _____	X-wind _____
External Check _____	Rejected _____
Pre-Start _____	Departure Procedure _____
Cockpit Checks _____	
Radio Work _____	
Taxing _____	
After T/O _____	
Approach & Landing	Air Work
Normal Approach _____	IF Departure _____
Flapless Approach _____	Holding (NDB/VOR) _____
X-Wing Landing _____	IF Approaches _____
Overshoot _____	- NDB _____
	- VOR _____
	- ILS _____
	Engine Out _____
	Circling Approach _____
	Stalls _____
	Steep Turns _____
	SE Overshoot _____

INITIAL AND RECURRENT PILOT TRAINING	
Emergencies	Others
Engine Fall-Cruise _____ Engine Fire Ground _____ Engine Fire Air _____ Electrical Fire _____ Electrical Failure _____ Flap Asymmetry _____ L/G Fail To Extend _____	Technical Knowledge Engine Limits _____ Air Speeds _____ Systems _____ _____ _____ _____
Weight and Balance	
Comments:	
Recommendations:	
Pilot Competent to Conduct Assigned Duties	
Check Pilot: _____	
License No: _____	

CHAPTER

8

<Insert Company Name>

Chapter 8: Dangerous Goods

Chapter 8

8.1 General

8.1.1 Purpose

The purpose of this document is to provide direction and assistance to all company personnel involved in the handling, offering for transport or transporting of dangerous goods by air.

8.1.2 Company Dangerous Goods Program Coordinator

The company Dangerous Goods Program Coordinator is (Company Title and telephone number OR Individual Name and telephone number). The company Dangerous Goods Coordinator is responsible for maintaining the company dangerous goods program and acting as the liaison between the company and the Regional Commercial and Business Aviation Dangerous Goods Office of Transport Canada.

8.1.3 Legislation

- a) The legislation identified in the left hand column of the following table governs the handling, offering for transport and transporting of dangerous goods by air. Indicated in the following boxes is the company location where the current edition of these documents can be found.

LEGISLATION	LOCATION
The Transportation of Dangerous Goods Act, 1992 (TDGA)	
The Transportation of Dangerous Goods Regulations, (TDGR)	

LEGISLATION	LOCATION
The International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI)	
The International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air - Supplement (ICAO SUPP)	
The International Civil Aviation Organization Emergency Response Guidance for Aircraft Incidents involving Dangerous Goods	

NOTE: While the ICAO Technical Instructions document is the legal publication, the current IATA Dangerous Goods Regulations may be used by company personnel to comply with the provisions of the ICAO Technical Instructions.

8.2 Category of Operations

The TDGR regulates the handling, offering for transport and the transporting of dangerous goods by all modes, including air. Part 12 - Air, of the TDGR specifies the aviation related requirements. Sections 12.1 to 12.3 apply to the International and Domestic Transport by of dangerous by air and Section 12.4 to 12.17 apply to certain uniquely Canadian air operations, such as flights into locations not serviced by other means of transport.

List the company category or categories of operations. See Part 12 – Air, of the TDGR.

8.3 Training

8.3.1 Transportation of Dangerous Goods Regulations

A person who handles, offers for transport or transports dangerous goods must:

- a) be adequately trained and hold a Training Certificate in accordance with the TDGR; or
- b) perform those activities in the presence and under the direct supervision of a person who is adequately trained and who holds a Training Certificate in accordance with the TDGR.

8.3.2 Approved Training Programs

"All dangerous goods training programs shall be in compliance with the Guidelines and References for the Development and Standardization of Dangerous Goods Training Programs for Air Transport in Canada (TP12208) and must be submitted for review and approval by Transport Canada prior to conducting training of company and non-company personnel."

NOTE: The following Transport Canada approved Training Program(s) are used to train company and non-company personnel: (Indicate the Approval Number, Type of Training, (i.e.: Cargo Acceptance, Ground Handling/Storage/Loading, Passenger Handling/Security Staff, Flight Crew Members, Crew Members (other than flight crew), Shippers and Shipper's Agent) and Name of Training Consultant, where appropriate.

8.3.3 Direct Supervision

For the purpose of handling, offering for transport or transporting of dangerous goods, this company defines 'direct supervision' as being within unobstructed eyesight and capable of an oral communication between the two persons.

8.3.4 Training Certificates

- a) An employer who has reasonable grounds to believe that an employee is adequately trained and will perform duties to which the training relates must issue a Training Certificate to the employee that includes the required information.
- b) A trained employee must have a Training Certificate issued by the employer. This Training Certificate must be given to an inspector immediately upon request.

- c) The company Dangerous Goods Coordinator shall ensure a record of training or a statement of experience, and a copy of each Training Certificate is retained for two years after the expiry date of the Certificate.
- d) The company dangerous goods Training Certificate is set out in Appendix A.

8.3.5 Non-Company Personnel

No person shall handle, offer for transport or transport dangerous goods on behalf of this company unless that person is a "trained person" or performing those duties under the direct supervision of a trained person.

N.B. There are many air carriers who delegate to third parties some of the duties that are assigned to them in the ICAO Technical Instructions and in the Transportation of Dangerous Goods Regulations. There is nothing in these Regulations that hinders this practice but it should be noted by air carriers that delegating responsibility for certain duties does not include delegating liability for those duties. This means that if an air carrier contracts a third party to provide, for example, cargo handling, acceptance or loading activities, the approval program for training mandated by the ICAO Technical Instructions and carried out by the Civil Aviation Directorate, Transport Canada, applies to those third party activities.

The Transport Canada approved training program(s) is/are listed in section 8.3.2 and the name of any third party and the type of service they provide is listed in section 8.5.6.

8.4 Operator Responsibilities

Prohibited Dangerous Goods Operations, Cargo Embargoes and Operator Variations

NOTE: The company shall identify any prohibited dangerous goods operations, cargo embargoes and operator variations in Appendix B, or enter "Not applicable".

8.4.1 Flight Attendants

Flight attendants must be trained in compliance with a 'Crew Member (other than Flight Crew)' Transport Canada approved Training Program.

NOTE: When there are no flight attendants, enter "Not Applicable".

8.4.2 Display of Dangerous Goods Notices

Notices giving information about the transportation of dangerous goods shall be prominently displayed in sufficient numbers and as a minimum, in the following areas:

- a) Passenger baggage check-in and ticket issuance areas;
- b) Passenger screening areas;
- c) Aircraft boarding areas;
- d) Baggage claim areas; and
- e) Cargo acceptance areas.

NOTE: Where the Air Operator does not have such an area enter "Not Applicable" adjacent to the appropriate heading.

8.4.3 Passenger Handling

- a) To assist in identifying prohibited dangerous goods in passenger baggage and responding to dangerous goods enquiries from passengers, all passenger handling staff must be "trained persons" or under the direct supervision of a "trained person". This requirement also applies to non-company personnel contracted to provide passenger-handling services
- b) The company Dangerous Goods Coordinator shall publish and maintain a current list of the general and company approved exceptions for dangerous goods carried by passengers in Appendix C. No other exceptions for dangerous goods carried by passengers will be given without the approval of the company Dangerous Goods Coordinator. A current copy must be available for reference by company and non-company personnel in each passenger baggage check-in and aircraft boarding area.
- c) Passenger check-in staff must obtain confirmation from the passenger that the content of any suspicious item is not dangerous goods.

NOTE: Where the Air Operator does not have such an area, enter "Not Applicable".

8.4.4 Baggage Handling

- a) To assist in identifying prohibited dangerous goods in passenger baggage and responding to leakage or spillage of dangerous goods in passenger baggage, all baggage handling staff must be "trained persons" or under the direct supervision of a "trained person". This requirement also applies to non-company personnel contracted to provide baggage-handling services.

- b) The company Dangerous Goods Coordinator shall publish and maintain current procedures for handling dangerous goods detected in passenger baggage, emergency procedures for leakage or spillage of dangerous goods in passenger baggage and reporting procedures for such occurrences. A current copy must be available for reference by company and non-company personnel in each baggage handling area.

NOTE: Where the Air Operator does not have such an area enter "Not Applicable".

8.4.5 Security Screening

- a) All persons engaged in the security screening of passengers, crew and their baggage must be "trained persons" or under the direct supervision of a "trained person" and capable of identifying prohibited dangerous goods in passenger and crew carried baggage. This requirement also applies to non-company personnel contracted to provide security screening services.
- b) The company Dangerous Goods Coordinator shall publish and maintain a current list of general and company approved exceptions for dangerous goods carried by passengers or crew as set out in Appendix C.

The company Dangerous Goods Coordinator shall also implement procedures to be taken when prohibited dangerous goods are detected and removed from passenger or crew carried baggage as set out in Appendix D.

No other exceptions for dangerous goods in passenger or crew carried baggage will be given without the approval of the company Dangerous Goods Coordinator. A current copy of approved exceptions and procedures must be available for reference by company and contract personnel at each security screening point as set out in Appendix C and D.

NOTE: Where the Air Operator does not have such an area enter "Not Applicable".

8.4.6 Company Dangerous Goods Consignments

The handling, offering for transport, and transporting of a dangerous goods consignment must comply with the Transportation of Dangerous Goods Regulations.

8.4.7 Company Dangerous Goods Permits For Equivalent Level of Safety

The Permit(s) for Equivalent Level of Safety issued to this company by Transport Canada are listed in Appendix E and include; permit number, issue date, expiry date and general provisions of the permit.

NOTE: If no permits have been issued enter "Not Applicable".

8.5 Handling Procedures

8.5.1 Acceptance Procedures

- a) All dangerous goods consignments and accompanying documentation offered for transport must be checked for compliance with the applicable regulatory requirements. The appropriate company dangerous goods acceptance checklist is set out in Appendix F.
- b) When a dangerous goods consignment does not meet the regulatory requirements, it shall be refused for transport. A copy of the completed company dangerous goods acceptance checklist outlining the reason(s) for refusal shall be retained by the company and another copy given to the person offering the consignment.
- c) Cargo Acceptance staff must obtain confirmation from the shipper that the content of any suspicious item is not dangerous goods.

8.5.2 Storage Within the Facility

- a) While on company property, dangerous goods consignments are to be stored in a manner that prevents leakage or spillage, or interaction between dangerous goods and are to conform with the requirements of the various laws regarding health and safety. Where practicable, dangerous goods consignments will be positioned so that the dangerous goods safety labels are visible.
- b) Where practicable, the person in charge of each warehouse or cargo facility shall ensure dangerous goods in transit are stored separately in an accessible and prominently signed area. Compliance with all airport and local fire regulations is mandatory.

8.5.3 Loading of Dangerous Goods On Aircraft

- a) All dangerous goods shall be inspected immediately before loading to determine they are free of leakage or damage. In the case of leakage, spillage or damage, the dangerous goods shall not be loaded on board the aircraft.

Where any package of dangerous goods on board an aircraft appears to be damaged or leaking, the operator must remove such package from the aircraft, or arrange for its removal by an appropriate authority or organization and arrange for its safe disposal. The person in charge must also take the appropriate action to decontaminate the remainder of the consignment, the aircraft or other packages if they have been contaminated. The Dangerous Goods Coordinator should be immediately notified upon discovery of the damaged or leaking dangerous goods packaging.

- b) As appropriate, the pilot-in-command shall be given, as early as practicable before departure, written information concerning the dangerous goods loaded on board the aircraft. The information will also include confirmation that there was no evidence of damage or leakage at the time of loading. The appropriate company dangerous goods Pilot Notification Form is set out in Appendix G.
- c) At a minimum, dangerous goods, which might react dangerously with one another, must be stowed on board the aircraft in accordance with the ICAO Table 7-1 - Segregation Between Packages shown on the reverse side of the Pilot Notification form set out in Appendix G.
- d) Dangerous goods shall be protected from being damaged during flight. They shall also be secured to prevent movement during flight.
- e) Packages or overpacks of dangerous goods bearing the "Cargo Aircraft Only" label shall not be loaded on board passenger carrying aircraft.
- f) The location and numbering system of cargo compartments together with the maximum total sum of transport indexes of radioactive material permitted in each compartment are as indicated in the aircraft layouts shown in Appendix H.

NOTE: When Section 12.9 - Limited Access of the TDGR requires the name of an individual or an example of a Document to be included in the Operations Manual that information is set out in Appendix I.

8.5.4 Full Load of Radioactive Materials

NOTE: Where the air operator transports bulk and full loads of radioactive material, detailed handling, loading and unloading procedures shall be recorded here.

NOTE: If not applicable enter "Not Applicable".

8.5.5 Unloading Dangerous Goods From Aircraft

All dangerous goods when being unloaded from the aircraft shall be inspected for signs of damage or leakage. If evidence of damage or leakage is discovered, the operator must remove such package from the aircraft, or arrange for its removal by an appropriate authority or organization and arrange for its safe disposal. The person in charge must also take the appropriate action to decontaminate the remainder of the consignment, the aircraft or other packages if they have been contaminated. The Dangerous Goods Coordinator should be immediately notified upon discovery of the damaged or leaking dangerous goods packaging.

8.5.6 Contracted Services

- a) (Name of third party) is contracted for the (State the type of service, such as: shipping, acceptance, loading and unloading of dangerous goods) at (State the location where the service is being performed) and shall comply with all regulatory requirements for handling, offering for transport or transporting dangerous goods and the applicable procedures set out in this manual.
- b) Where the Contracted Services use any TDGR related documents which is different from those prescribed by the company in this Chapter of their Operations Manual they are to be shown in Appendix J.

NOTE: If there are no contracted services enter "Not Applicable".

8.5.7 Record Keeping

- a) Copies of the transport document and other related documents shall be retained for the required period of time at (State location)_____.
- b) (Name of third party) _____ shall retain copies of the transport document and other related documents for the required period of time at (State location)_____.

NOTE: Delete this sentence if there is no contracted third party.

NOTE: When Section 12.9 - Limited Access of the TDGR requires an example of a Document to be included in the Operations Manual that information is set out in Appendix I.

8.6 Reporting

8.6.1 Reporting Undeclared or Misdeclared Dangerous Goods

When undeclared or misdeclared dangerous goods are discovered in cargo, a report must be made immediately to the appropriate Regional Superintendent, Commercial and Business Aviation Dangerous Goods, Transport Canada and the National Authority of the country; if not in Canada.

8.6.2 Reporting Dangerous Goods in Passenger Baggage

When dangerous goods not permitted for carriage are discovered in passenger or crew baggage a report must be made to the appropriate Regional Superintendent, Commercial and Business Aviation Dangerous Goods, Transport Canada and the National Authority of the country; if not in Canada.

8.6.3 Accidental Release or Imminent Accidental Release Report Requirements

- a) Where a “Dangerous goods accident*” or a “Dangerous goods incident**”, as defined in the ICAO TI’s, occurs on board an aircraft, in an aerodrome or at an air cargo facility the person who has possession of the dangerous goods at the time must immediately report to the individuals prescribed in the TDGR Part 8.

Organization or individual	Contact Information (E.g., phone number and name, where appropriate.)
Appropriate provincial authority (See Table to Part 8, TDGR)	
The person’s employer	
The consignor of the dangerous goods	
Regional Civil Aviation Office (See the following website address for the list of Regional Offices information: www.tc.gc.ca/CivilAviation/commerce/DangerousGoods)	
CANUTEC	(613) 996-6666
Operator of the airport	

*A **dangerous goods accident means**, "An occurrence associated with and related to the transport of dangerous goods by air which results in fatal or serious injury to a person or major property damage". ICAO TI’s 2001/2002

****A dangerous goods incident means**, "An occurrence other than a dangerous goods accident associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardizes an aircraft or its occupants is also deemed to be a dangerous goods incident". ICAO TI's 2001/2002

- b) A 30-Day Follow-up Report must be forwarded within 30 days of the dangerous occurrence to the following address:

Director General
Transport Dangerous Goods Directorate
Place de Ville, Tower C, 9th floor
330 Sparks Street
OTTAWA, Ontario
K1A 0N5

- c) The 30-Day Follow-Up Report form is set out in Appendix K.

8.6.4 In-Flight Emergency Involving Dangerous Goods

If an in-flight emergency occurs and the situation permits, the pilot-in-command must inform the appropriate air traffic services unit of any dangerous goods carried as cargo on board an aircraft. Wherever possible this information should include the proper shipping name and/or UN number, the class/division and for Class 1 the compatibility group, any identified subsidiary risk(s), the quantity and the location on board the aircraft, or a telephone number where a copy of the written information to the pilot-in-command during that flight can be obtained. When it is not considered possible to include all the information, those parts thought most relevant in the circumstances should be given.

As prescribed in Section 12.9 – Limited Access, TDGR the pilot in command of a helicopter transporting an external load of dangerous goods suspended from the helicopter must notify the appropriate air traffic services unit that dangerous goods are in the external load.

8.7 Emergency Procedures

8.7.1 Company Dangerous Goods Coordinator

The Company Dangerous Goods Coordinator should develop, maintain and promulgate appropriate procedures to follow during an emergency involving dangerous goods. As well, the company Dangerous Goods Coordinator should be the contact person for information on the decontamination and disposal of damaged or leaking packages containing dangerous goods.

8.7.2 On Board Aircraft

All dangerous goods when being unloaded from the aircraft shall be inspected for signs of damage or leakage. If evidence of damage or leakage is discovered, the operator must remove such package from the aircraft, or arrange for its removal by an appropriate authority or organization and arrange for its safe disposal. The person in charge must also take the appropriate action to decontaminate the remainder of the consignment, the aircraft or other packages if they have been contaminated. The Dangerous Goods Coordinator should be immediately notified upon discovery of the damaged or leaking dangerous goods packaging.

8.7.3 Infectious Substances

The air operator should identify its procedures for dealing with damaged and leaking infectious substance packaging. If a contracted third party conducts the cargo handling, its procedures are to be inserted here. If the air operator does not handle or transport infectious substance consignments, a repeat of the company prohibition/embargo is inserted here.

8.7.4 Radioactive Material

The air operator should identify the procedures for monitoring and dealing with damaged radioactive material packaging. The location of the monitoring device(s) must also be identified. If a contracted third party conducts the cargo handling, its procedures are to be inserted here. If the air operator does not handle or transport radioactive material consignments, a repeat of the company prohibition/embargo is inserted here.

8.7.5 Emergency Procedures for Flight Crew

Emergency procedures for flight crew can be found in the current ICAO Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods.

NOTE: The air operator must provide such information to the pilot-in-command; either by the above document or by any other document which provides similar information. If another document is used, enter the document title in place of the ICAO document title. If another document is used to supplement the ICAO document, enter the document title after the ICAO title.

8.7.6 Emergency Procedures for Ground Handling and Cargo Acceptance Staff

Emergency procedures for Passenger and Baggage Handling, Company Stores, Commissary, Warehouse, Ramp and Cargo Acceptance Staff can be found in the current Transport Canada 2000 Emergency Response Guide.

The air operator should insert any additional or specific ground handling emergency procedures and document title(s) here.

8.7.7 Dangerous Goods Emergency and Information Telephone Number

The Canadian Transport Emergency Response Centre, or 'CANUTECH' is located in Ottawa, Ontario and operated by Transport Canada.

- a) For 24-Hour Emergency Response Information, call collect: (613) 996-6666 or *666 on a cellular phone.
- b) For 24-Hour General Information, call: (613) 992-4624.

8.7.8 Emergency Action

- a) STEP 1 - Evacuate and secure the area where the damaged or leaking dangerous goods were found.
- b) STEP 2 - Identify the dangerous goods, quantity and, if possible, the name of the consignor.
- c) STEP 3 - Notify your supervisor and, if practicable, the company Dangerous Goods Coordinator.
- d) STEP 4 - In the case of injury, call the nearest ambulance.

- e) STEP 5 - Call the nearest Fire or Police Department who will assist you in contacting the nearest source of expert assistance. Make sure you clearly identify your location, the package consignor and the extent of any injury or damage.
- f) STEP 6 - As appropriate, call CANUTEC for emergency response information.
- g) STEP 7 - Have a person standby for any telephone reply and to give direction to the responding fire, police, and/or ambulance services.
- h) STEP 8 - Notify the Regional Superintendent, Commercial and Business Aviation Dangerous Goods, Transport Canada
- i) STEP 9 – Notify Airport Authority/Manager if emergency is at an airport.

NOTE: The company Dangerous Goods Coordinator should review these nine steps to ensure they meet the company's needs and sequence of emergency steps to be taken.

ANNEX – A: Company Training Certificate

<A copy of the Company Training Certificate will be placed here.>

ANNEX – B: Prohibited Dangerous Goods Operations, Cargo Embargoes and Operator Variations

<The company Prohibited Dangerous Goods Operations, Cargo Embargoes and Operator Variations will be placed here.>

ANNEX – C: Exceptions for Dangerous Goods Carried by Passengers

<The list of the general and company approved exceptions for dangerous goods carried by passengers will be placed here.>

ANNEX – D: Company Procedures

<The company procedures to be followed when prohibited dangerous goods are detected and removed from passenger or crew carried baggage will be placed here.>

ANNEX – E: Transport Canada Permits of Equivalent Level of Safety

<Any TRANSPORT CANADA Permits of Equivalent Level of Safety issued to the Company will be placed here.>

ANNEX – F: Company’s Dangerous Good Acceptance Checklist

<A copy of the Company’s Dangerous Good Acceptance Checklist is inserted here.>

ANNEX – G: Notification-To-Pilot-In-Command

NOTIFICATION –TO-PILOT-IN-COMMAND											
BASE: AIRCRAFT _____						DATE: _____ PASSENGER AIRCRAFT/CARGO ONLY AIRCRAFT _____					
The Dangerous Goods listed below have been loaded on this aircraft											
AWD Number	Destination (Aerodrome of unloading)	No. of Package	Shipping Name	UN Number	Class	Packing Group	Sub. Risk	Net Quantity or Gross Mass	Loading Location	State Exemption	Transport Index (Radioactivities)
<p>I certify that the Dangerous Goods listed above have been loaded according to the applicable regulations and that the packages were intact and not damaged or leaking.</p> <p style="text-align: center;"> <input style="width: 400px; height: 20px;" type="text"/> Signature of Cargo Agent </p> <p>I am aware of the Dangerous Goods loaded on this aircraft and their location.</p> <p style="text-align: center;"> <input style="width: 400px; height: 20px;" type="text"/> Signature of the Pilot-In-Command </p>											

Segregation Between Packages

Class or Division	Class or Division							
	1	2	3	4.2	4.3	5.1	5.2	8
1	Note 1	Note 2	Note 2	Note 2	Note 2	Note 2	---	Note 2
2	Note 2	---	---	---	---	---	---	---
3	Note 2	---	---	---	---	X	---	---
4.2	Note 2	---	---	---	---	X	---	---
4.3	Note 2	---	---	---	---	---	---	X
5.1	Note 2	---	X	X	---	---	---	---
5.2	Note 2	---	---	---	---	---	---	---
8	Note 2	---	---	---	X	---	---	---

An “x” at the intersection of a row and column indicates that packages containing these classes of dangerous goods may not be stowed next to or in contact with each other, or in a position which would allow interaction in the event of leakage of the contents. Thus, a package containing Class 3 dangerous goods may not be stowed next to or in contact with a package containing Division 5.1 dangerous goods.

Note 1 - See 7;2.2.2.2 through 7;2.2.2.4 of the ICAO Technical Instructions

Note 2 - This Class or Division must not be stowed together with explosives other than those in Division 1.4, Compatibility S.

Note 3 - Packages containing dangerous goods with multiple hazards in the class or divisions which require segregation in accordance with Table 7-1 need not be segregated from other packages bearing the same UN number.

ANNEX – H: Location and Numbering System of Cargo Compartments

<Insert the location and numbering system of cargo compartments together with the maximum total sum of transport indexes of radioactive material permitted in each compartment, where applicable.>

ANNEX – I: Limited Access of the Transportation of Dangerous Goods Regulations

<Information required in Operations Manual by Section 12.9 – Limited Access of the Transportation of Dangerous Goods Regulations>

ANNEX – J: Documents of Contracted Services

ANNEX – K: Accidental Release or Imminent Accidental Release Report

<Expected in first quarter of 2002.>