

Available Training Services

June 2011

All courses (see list and descriptions included below) are available for “in-house” delivery upon request by individual companies, or can be organized and sponsored by Dueck Aviation upon request by a group of companies or individuals in a particular location.

Posted fees are subject to change.

Course fees:

1 day courses - \$250.00 per person

2 day courses - \$360.00 per person

3 day courses - \$435.00 per person

4 day courses - \$485.00 per person

Managerial exam prep tutorial (or combined course/tutorial) - \$1000 per day

Human factors training issues investigation - \$1000 per day

Notes: Each CARs course participant, except for SMS, receives a copy of the latest version of the 400+ page book Aircraft Regulations Simplified by Dave Dueck

Each SMS CARs course participant receives an authorized copy of the relevant management system and safety management system chapters from Aircraft Regulations Simplified by Dave Dueck, and a copy of TC SI SUR-001 as amended

The certificate manager (“prmc”, “prm”, etc.) will receive a confidential written report of the issues discovered during a human factors issues investigation process.

Course fees are based on training conducted at a customer-supplied facility. Contact Dueck Aviation for pricing regarding our sponsored training at a public venue.

Minimum course charge is for 10 persons when there are less than 10 participants.

Hosting of a course that is open to other individuals on Dueck Aviation’s contact list for the area is welcomed, but is at the discretion of the hosting organization. Any additional hosting fees charged by the hosting organization would be applied to the external registrants. Dave Dueck welcomes organization’s to invite their TC principle inspector to attend company-hosted training. Dueck Aviation handles external registrations and billing unless otherwise desired by the hosting organization.

Tutorial or combined course/tutorial group size is minimum 1 person, maximum 4 persons.

Applicable **transportation and other travel fees** are applied as follows:

Air transportation: based on suitable available economy airfare plus applicable airfare taxes

Vehicle rental: based on suitable available economy rates

Lodging, meals, and per diem charge inclusive: flat fee of \$175.00 per night

All fees are subject to either **GST or HST as applicable.**

Contact Dueck Aviation to be added to our contact list for notification of courses at a public venue or at a locally hosted facility.

DUECK AVIATION TRAINING COURSES

A HUMAN FACTORS INITIAL AND RECURRENT (LEGALLY REFERRED TO AS “UPDATE”) TRAINING

Dueck Aviation offers a traditional 2 day human factors workshop course, and a traditional reduced 1 day course that will involve some level of workshop discussion. The training requirements for human factors in CAR Standard 573.06(3) are the same whether it is for initial training or for update training. In other words, the distinction between initial and update training is not based on course content or length, but on the training needs that have been identified for the personnel, which can then affect course content and length.

Initial training is a matter of an explanation of the stated subjects to ensure an appropriate level of understanding. **However,** CAR Standard 573.06(5) requires that **the AMO is to** use the information derived from its quality assurance evaluations during its first 3 years (“initial cycle”) of operation to **determine its update training needs.** At that point, the company should have adequate insight from at least 3 full-scope internal evaluation audits, and likely a TC audit or assessment, and perhaps even client audit(s), plus perhaps some evaluation inspections focused on particular processes. This suggests that a company can function for 3 years without any update training, relying on the initial training, although the requirement for “additional training” can not be ignored [CAR Standard 573.06(2)(c)] during that period. From that point on however, it must actively apply an update training program.

Maintenance & Manufacturing **Policy Letter 9** paragraph 3.3 **instructs TC inspectors to base their approval of an AMO’s update training program on the company’s procedures for conducting “in-house systems analysis” by “measuring” against their “objective in-house performance indicators”,** and not on a program involving “hard” or prescribed requirements. While this policy letter specifically mentions course duration, CAR Standard 573.06(5) does not limit the evaluations to this aspect alone. It is up to the company to apply a process to determine all aspects of training needed, including when someone needs training (there is no prescribed requirement in terms of frequency or “how often”), the content of the needed training, the appropriate method of the training, and the duration of the training based on the evidence that it has garnered, so that “meaningful update training” will take place that will “ultimately result in improved maintenance reliability and (company) operational performance”. **Therefore a pre-established human factors update training course developed independently by a training provider is likely not CARs compliant** with CAR Standard 573.06(5).

I have been assisting companies for several years in **determining** their **human factors training needs,** **and** then **formulating a course that covers all of the requirements but is focused on the particular company’s issues** discovered. I begin by interviewing the staff, and then take time to prepare a course with the appropriate material before delivering the training.

For the interviewing, I use an investigative process developed by an aviation industrial psychologist, and have taken training (significantly essential) from him on using it. I developed this concept in the context of the Safety Management System requirements that are slated to be applicable to all AMOs within the next few years - specifically the SMS requirement to proactively identify the hazards within an organization that could lead to an accident. This is where **human factors issues link with safety management requirements.** But SMS requirements mandate that organizations conduct root cause analysis of those hazards. **Root cause analysis involves** discovering the **contributing factors** (even multiple layers of contributing factors) wherein an employee has or could make a mistake, **and** ultimately the **organizational factors** that allow the contributing factors to exist. While the investigative tool was developed for the purpose of reactive accident investigation, I consulted with the authoring psychologist on using it proactively, for which he was very supportive and invited me to stay in touch. Without a systematic investigation it is unlikely that management will become aware of the real issues, and there are also significant related reasons for obtaining an independent investigation. The process proves to be very revealing, and management needs to be prepared to deal with the organizational issues.

As required by CAR Standard 573.06(3), **the course includes training on human performance** as it relates to the issues discovered, **and** involves discussions on **error containment and error prevention** for those issues. As such it satisfies both initial and update training requirements for the particular organization.

Initial workshop course **duration** based on traditional industry expectations: 2 days

Reduced or custom-developed update and/or initial training **duration**: 1 day

Investigation **duration** for custom-developed update and/or initial training:

Number of applicable employees divided by 4 (rounded up) = number of half-days needed

B QUALITY ASSURANCE AUDITOR TRAINING

Dueck Aviation is intending to offer the training component for the Canadian Aviation Maintenance Council QA Auditor Certificate. Contact Dueck Aviation for the latest development.

Training **duration**: 2 days

C CARs (“REGULATORY”) TRAINING

Dueck Aviation CARs training courses, delivered individually or combined where appropriate, vary for different segments of the industry. All of them are **studies of the rules themselves to ensure that none of the training is based on a personal perception** of rules (or absence of rules) that are understood to exist (as seems to so often be the case), **or on “interpretation”**.

The 2 most common CARs courses are a combined course **on aircraft operator and aircraft AMO requirements, and** a course **on SMS** requirements that applies equally to airport operators, aircraft operators, AMOs, manufacturers, and design approval organizations. These **are the only 2 courses that Dueck Aviation initiates at public venues** from time to time.

While the CARs SMS course is generally attended as initial training, the other CARs courses are generally applicable for update training, and in most cases actually serve to identify matters that have not been correctly or adequately understood.

1. CARs for aircraft Operator Certificate holders

I have developed 2 different maintenance control courses. The courses are **on the maintenance control management (ie: operator certificate) requirements and on the maintenance control activity requirements** applicable for a company that holds an aircraft operator certificate. One course is applicable to commercial operator certificate holders, while the other is applicable to private operator certificate holders. Attendees need to be prepared for awakening revelations.

Recommended training **duration**: 2 or 3 days, depending on the level of detail desired.

Combined maintenance control and maintenance training **duration**: 3 very intense (recommend 4) days.

2. CARs for private operation of an aircraft

This is a course **on the maintenance control activity requirements** applicable to the private operation of small aircraft (aeroplanes or helicopters) that are not both pressurized and turbine powered. Attendees need to be prepared for awakening revelations.

Recommended training **duration**: 1 day.

3. CARs for AMOs

I have developed 2 different maintenance courses, one for aircraft AMOs and one for specialist AMOs, on **the maintenance management (ie: “AMO”) requirements and on the maintenance activity requirements**. For an aircraft rated AMO, the course includes some comparisons with maintenance control, so that the distinctions are understood, but does not include the requirements of maintenance control per se due to non-relevance. Attendees need to be prepared for awakening revelations.

Recommended training **duration**: 2 or 3 days, depending on the level of detail desired.

Combined maintenance control and maintenance training **duration**: 3 very intense (recommend 4) days.

4. CARs for Maintenance Release

This is a course **for “the guys in the shop”** (and for their supervisors / managers) on the many aspects that are included (and what is not included) when a person signs a maintenance release, whether as an individual AME, an AME with ACA in an AMO, or a person with SCA in an AMO. Course participants are consistently surprised with the many revelations. Some relevance to maintenance management (AMO) requirements is included, but the course does not include the requirements of maintenance management per se. The main aspects of this course are **also included in the AMO courses above, but not to this level of detail** due to the management focus of those courses.

Recommended training **duration**: 2 days.

5. CARs for Maintenance Records

This is a course on the **requirements for making a record of maintenance work**. These requirements are **also included in the Maintenance Release course** above to the same level of detail. They are **also included in the AMO courses above, but not to the same level of detail**. The operator requirements for keeping aircraft technical records are included only to the degree that a maintenance person or AMO manager needs to understand.

Recommended training **duration**: 1 day.

6. CARs for Aircraft Technical Records

This is a course on the aircraft operator **requirements for keeping aircraft records**. These requirements are **also included in the Maintenance Control course above, though not to the same level of detail** due to time constraints.

Recommended training **duration**: 1 day.

7. CARs for Approved Distributors

This is a course on the **proposed requirements for approved distributors** that are to replace the existing Airworthiness Manual requirements. These proposals are intended to **“mirror” AMO parts management requirements**.

Recommended training **duration**: 1 day.

8. CARs for Approved Manufacturers

This is a course on the **requirements for approved manufacturers**.

Recommended training **duration**: 1 day.

9. Exam prep for operator prmc, AMO prm, AMO QA manager, and AMO SMS manager

This is a tutorial session to prepare a person to write the TC regulatory management exam, and to have the TC managerial interview. The focus is on understanding rather than on memory. As such our **prerequisite for this training is to have recently attended the applicable CARs course above. Alternatively the tutorial and the course can be combined** if necessary to meet timelines. While Dueck Aviation does not provide a guarantee as to exam success, this has, to our knowledge, provided a 100% success rate. Much more importantly, it provides the regulatory understanding needed to thereafter properly function as a manager.

Recommended tutorial **duration**: 1 day.

10. CARs for Safety Management (SMS)

Waiting until the SMS requirements are made mandatory for the particular certificate holder is self-defeating. All aspects of the SMS requirements can be practiced and understood prior to getting them approved and included in the company's manual, which should reduce anxiety when they are mandated for the particular group of organization, and also reduce (likely eliminate) the need for the Implementation Phase I gap analysis and project plan when the requirements are made mandatory.

This course identifies approximately 35 (depending slightly on how a few of the detailed requirements are separated or combined) **different requirements established in the CARs** or (for a couple of "requirements") established in the Transport Canada assessment guide (SI SUR-001 as amended). All of the requirements are shown to link to the 17 TC "SMS model" "requirements", and are **presented in a sequential manner** (unlike how they appear in the CARs or in the TC SMS model) so that they can be readily understood and implemented as simply as possible, appropriate to the company, and effective in preventing accidents. **This is the only publicly available SMS training based on the CARs requirements and delivered by someone who was involved as a member of the Canadian Aviation Regulations Advisory Council Technical Committee** where the applicable regulations were discussed and accepted by industry representatives.

The course is designed to meet the specific training requirements in CAR Standard 573.06(8) for AMOs, but is equally applicable to holders of an aircraft operator certificate, airport operator certificate, manufacturer certificate, or design approval organization certificate, because the SMS requirements (while not necessarily the training requirements) are essentially the same for all of these organizations.

The 35 requirements are first identified, then presented as a system, and then individually **explained as to "how to"** so that a company can be both compliant and effective. All of the required procedures should be able to be developed and implemented within 30 to 90 days during conduct of normal operations, depending on the time devoted in doing so. Thereafter, the company can apply continuous improvement, and confidently face a TC assessment, both of which are also addressed in the course.

While CARs SMS requirements replace the concept of a safety officer, **this course would also serve to fulfill the safety officer training requirement where it currently still exists** in CARs Part VII.

Duration: 2 days.