Syllabus

Quality Assurance for Canadian Aviation Certificate Holders

7 Hours

Meeting called by:	Your Agency/Company
Type of meeting:	Class room style, non certification training class
Facilitator:	DTI Training Consortium Primary Instructor B.A./Certified Government Instructor/Minimum 300 hrs experience. ASQ Certified Engineer/Manager. Transport Canada Approved Instructor.
Attendees:	Canadian Aviation certificate holders who are required to meet the Safety Management System Requirements for a Quality Assurance Program.
Please read:	This is a basic course, requiring participation in, analysis , implementation, and maintenance of a Quality Assurance Program to meet Transport Canada's SMS Regulation.
Please bring:	Pen, pencil, hi-lighter etc. Reference Manuals and Materials, **are provided by DTI Training**

Agenda Topics

Introduction

Seminar Times and Breaks

What is Quality?

Why are you here?

- Transport Canada and the QA mandate
- Under the Safety Management System.
- Assessment vs. Audit
- The cost of implementation
- The Commitment for a Quality Program
- The Benefits of a Quality Assurance Program

Goals and Objectives

To educate and understand the Aspects of a good Quality Assurance Program

To communicate the importance of establishing a good QA program. To show how to implement a QA program To show the advantages of a good QA program

Brief History of Quality Assurance

Guilds and Unions
Industrial Revolution
WWI
WWII
Dr. Walter Shewhart
Dr. Edwards Deming
Japan and American Response
ISO 9000
Six Sigma Quality
Kaizen Quality
Quality Today

LESSON 1: Definitions

Quality Assurance
Quality Control
QAP
Continuous Improvement
Process
Process Flow
Statistical Process Control
Control Charts
Corrective Action
Root cause
Statistical Sampling

LESSON 2: Processes

Lesson of the "F"s
The Philosophies of Dr. Edwards Deming
Video: "The Red Bead Experiment"
Discussion of the Red Bead Experiment
Video: "Lessons learned from the Red Beads."
Process Flowing
Process Flowing Practical Exercises

LESSON 3:Audit Checklists

Checklist interactions
Configuration Management
Audit Checklist Writing: Practical Exercise

LESSON 4:Process Control
(and some tools to accomplish this)

What is Process Control
Introduction to Statistics
The Normal Distribution Curve
The "Quincunx" Machine
Statistical Process Control
Process Model
Measures of Central Tendency
Measures of Dispersion
Standard Deviation
How to create the Control Chart
What control charts do
Attribute vs. Variable Charts
Analysis of Control Charts
Process Improvement

LESSON 5: Corrective Action

The "Cause and Effect Diagram"
Fishbone Diagram : Practical Exercise

LESSON 6: "The Quality Culture"

The ISO9000 generation
Best practices in Quality Assurance
Due Diligence

WORKSHOPS and GROUP EXERCISES

Course Questions

Course Critique

Course Conclusion

Special notes:	This course is comprehensive and includes a number of exercises designed to lead the student to conclusions on the implementation of a good Quality Assurance Program. These exercises will include problem identification, problem solving and the communication skills needed to operate under Quality Assurance requirements of the Transport Canada SMS Regulation.