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# A Cabin Crew Quality Manual for ProffsAviation

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Laurea University of Applied Sciences

## A Cabin Crew Quality Manual for ProffsAviation

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**A Cabin Crew Quality Manual for ProffsAviation**

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The objective of this thesis was to write a Cabin Crew Quality Manual for ProffsAviation to fulfil the requirements from the European Aviation Safety Agency to get the approval for the initial training, the right to issue cabin crew attestations and to show the external customers that ProffsAviation is operating and delivering a service product according to required standards.

ProffsAviation is a training organization approved by the European Aviation Safety Agency, EASA and the Finnish Transport Safety Agency, Trafi aviation authorities. The need for a quality manual was generated from the aviation authorities to develop its functions and training and fulfilling the requirements of the aviation authorities.

The objective formed two important goals. The first goal was to get familiarized with and read about quality, quality management, quality systems and what are the demands for producing and writing a quality manual in order to create a Cabin Crew Quality Manual, CQM fulfilling the demands and requirements of the European Aviation Safety Agency, EASA and the Finnish Transport Safety Agency, Trafi aviation authorities.

The second goal was to discuss why ProffsAviation needs a training and quality manual and present the requirements for the quality manual of ProffsAviation. This was carried out by looking into the aviation requirements and comparing different airlines' quality manuals.

Theoretical information about quality, quality management, quality systems and how to produce and write a quality manual was collected. The research resulted in important and valuable information regarding the topics, which formed the basis for producing and writing a Cabin Crew Quality Manual.

Keywords: **Quality assurance, quality management**

Eklund, Maria

### En kvalitetshandbok för ProffsAviation

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Syftet med detta examensarbete var att utveckla en skolnings- och kvalitetshandbok för ProffsAviation. Handboken skall fungera som ett verktyg inom ProffsAviations kvalitetsledningssystem för godkännandet av grundutbildningen, utfärdandet av certifikat, samt ett bevis för att ProffsAviation följer luftfartsmyndigheternas bestämmelser.

ProffsAviation är en utbildningsorganisation som godkänts av luftfartsmyndigheterna. Behovet av en kvalitetshandbok framställdes från luftfartsmyndigheterna i och med de nya bestämmelserna för grundutbildningen inom luftfarten.

Två mål bestämdes på basen av ändamålet.

Det första målet var en teoretisk undersökning av kvalitetsstyrning, kvalitetssystem, kvalitetsledningssystem samt hur en kvalitetshandbok skulle konstrueras så att den uppfyller luftfartsmyndigheternas krav.

Det andra målet var att diskutera varför ProffsAviation behöver en skolnings- och kvalitetshandbok, samt kraven för handboken. Detta genomfördes genom att bekanta sig med de olika bestämmelserna och kraven inom flygbranschen, samt jämförande av olika flygbolags kvalitetshandböcker.

Undersökningen genomfördes genom att samla relevant teoretisk information om de specifika målen. På basen av den viktiga och relevanta informationen kunde examensarbetet utgöra en stabil grund för skapandet av kvalitetshandboken.

Nyckelord: Kvalitet, kvalitetssystem, kvalitetshandbok

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## Abbreviations

CAA	Civil Aviation Authority
CASSOA	Civil Aviation Safety and Security Oversight Agency
CBT	Computer Based Training
CCA Attestation	Cabin Crew Attestation
CCH	Cabin Crew Handbook
CCM	Cabin Crew Member
CQM	Cabin Crew Quality Manual
EASA	European Aviation Safety Agency
EU	European Union
EU-OPS	EU Operations
ICAO	International Civil Aviation Organization
MQR	Management Quality Report
PDCA	Plan Do Check Act
SMS	Safety Management System
Trafi	Finnish Transport Safety Agency
TQM	Total Quality Management
QM	Quality Management
QMS	Quality Management System

## 1 Introduction

The Legislation and requirements of European Aviation Safety Agency, EASA is governing the initial training for cabin crew candidates. Fulfilling the EASA requirements the training organization needs to have a quality assurance system to guarantee that standards, procedures and systems are fulfilled. Each provider is free to decide these independently, but they need to be approved by the Finnish Civil Aviation CAA-Finland/Trafi.

The idea of writing and creating a Cabin Crew Quality Manual, CQM for ProffsAviation, came from Director, safety training of ProffsAviation, as the European Aviation Safety Agency, EASA has established new requirements for the training organizations within EU. The aim and purpose of the Cabin Crew Quality Manual, CQM is to describe the requirements of the initial training programme according to the European Aviation Safety Agency, EASA and processes which are designed to sustain, monitor and continuously improve the quality of the initial training programme, and to explain the administrative process for the issue and renewal of the CCA Attestation and to explain the requirements to receive such an attestation (Kumar 2014). Quality, through the implementation of a CQM, is an excellent opportunity to consider the needs and expectations of the customers and EASA. Quoting Executive director, Patrick Ky at EASA (2016), it also provides a perspective on the fulfilment of the objectives, how we perform our daily work, how we are organised, the risks we face, and the tools we utilise. We can also assess regularly how we can continue to improve our processes within the training organization.

### 1.1 Objectives

The objective of the thesis was to write a Cabin Crew Quality Manual for ProffsAviation to fulfil the requirements from the European Aviation Safety Agency, EASA to get the approval for the initial training, the right to issue cabin crew attestations and to show the external customers that ProffsAviation is operating and delivering a service product according to required standards. ProffsAviation is a training organization approved by the Finnish Transport and Safety Agency, Trafi and European Aviation Safety Agency, EASA aviation authorities. The need for a quality manual was generated from the aviation authorities to develop its functions and training, and fulfilling the requirements. The objective formed two important goals. The first goal was to get familiarized with and read about quality, quality management, quality systems and what are the demands for producing and writing a quality manual in order to create a Cabin Crew Quality Manual fulfilling the demands and requirements of the Trafi and EASA aviation authorities. The second goal was to discuss why ProffsAviation needs a training and quality manual, and present the requirements for the quality manual of ProffsAviation.



This was carried out by looking into aviation requirements and comparing different airlines' quality manuals.

The objective is to fulfil all relevant requirements in the training and to ensure that everyone involved in the training, be it authorities, customers, instructors or the students, will recognize and understand the information presented. The final goal of the manual is to provide guidance to regulators who certify and/or approve training courses and programmes. It may also be used as an assessment tool to evaluate the qualifications of the instructor (International Civil Aviation Organization 2009).

Theoretical information about quality, quality management, quality systems and how to produce and write a quality manual was collected. The research resulted in important and valuable information regarding the topics, which formed the bases for producing and writing a Cabin Crew Quality Manual.

## 1.2 ProffsAviation

ProffsAviation is a training organization providing airline operators with initial training and initial trained cabin crew member candidates. The company founded in 2006, is the first private independent cabin crew training organization in Finland approved by the Finnish Transport Safety Agency, Trafi and is based in Helsinki, Finland. The company was created to support airlines with initial trained cabin crew candidates during pregnancy leaves, changes in traffic programme or sickness periods. ProffsAviation has provided training since March 2007 and delivered initial trained cabin crew member candidates to its customers worldwide. ProffsAviation has been cooperating closely with the Finnish Transport Safety Agency, Trafi since December 2006, when the company was founded. The initial training is in accordance with Part-CC Appendix1 and the training program is approved by the Finnish Transport Safety Agency, Trafi in accordance with Part-CC Appendix1. The vision of ProffsAviation is to be regarded as having the most established and qualitative business, as well as the best service. The mission of ProffsAviation is to support airline operators worldwide by offering cost efficient, competitive and quality products.



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Figure 1: The mission of ProffsAviation (ProffsAviation 2016).

ProffsAviation values	What we do to support the values
Professional	We have the right competence to understand our business and the attitude never to resign and give up.
Reliable	We are a reliable provider for the customers
Qualitative	Quality is a necessity for the success of a business.
Care	We care for our company, customers, colleagues and ourselves.
Respectful	We follow local and international laws, regulations, policies, business ethics and competition rules.
Progressive	We train and develop ourselves to understand and apply leading technologies to support our business.
Guarantee of performance	We have smooth cooperation between the departments.

Table 1: The values guide, the behaviour and the way the business is conducted (ProffsAviation 2016).

The personnel of ProffsAviation include the Director, safety training; Head of recruitment and training; Chief, safety instructor; Chief, aero-medical instructors and hourly based instructors.

Director, safety training is responsible of the management of ProffsAviation and instructors, for the cabin crew safety training, and to ensure that it accurately reflects the training policies, regulations and procedures in force. The Head of Recruitment and Training is responsible of all administrative issues and all training records, reporting and summarizing training performance activity documentation after completion of training. The Chief instructors ensure that the training meets the standards set by Part-CC, the Finnish Transport Safety Agency, Trafi and the airline operators.

The overall goal of ProffsAviation is to offer support and cost efficient solutions for Airlines by providing flexible and sensible solutions, providing initial training, providing Part-CC Cabin Crew Initial training receiving a CCA Attestation certificate and providing Airlines with highly qualified initial trained Cabin Crew Member candidates. The aim of the quality policy of ProffsAviation is continuous improvement in quality to support the Finnish Transport Safety Agency, Trafi requirements and demands.

### 1.3 Research methods and limitations of the Thesis

Before the thesis the author did a project at Laurea University of Applied Sciences about the basics of quality management and quality handbooks. During the project theory related issues were being familiarized, such as books and previously written thesis's by other students. The research was conducted by gathering relevant theoretical information about the topics. Theoretical information about quality, quality management, quality systems and how to produce and write a quality manual was collected. The research resulted in important and valuable information regarding the topics, which formed the basis for producing and writing the Cabin Crew Quality Manual.

During the process of the thesis online sources were used, such as web pages, e-books and online manuals to compare. Suggestions were given from the mentor at Laurea UAS. The author has had the chance to work in a very professional environment within the airline industry, and hence also has got the chance to contact professionals by email.

### 1.4 Reliability and validity

The training and quality manual is based on the EU Operations regulations. The manual has been written according to the requirements of the European Aviation Safety Agency, EASA and the Finnish Transport Safety Agency, Trafi. Thus, the contents of the manual is valid and in accordance with regulations. The reliability of facts and figures is assured by ProffsAviation, Director of safety training; the European Aviation Safety Agency, EASA; and the Finnish Transport and Safety Agency, Trafi.

## 2 Quality management and quality manuals

While doing the theoretical research, the author found a few theorists, having focused on quality management. Walter Shewart, Armand Feigenbaum, Juran and Philip Crosby defined the quality management in different ways, which will be presented below.

As Walter Shewart was a statistician at Bell Labs during the 1920s and 1930s he developed quality control charts that are used to identify whether the variability in the process is random due to an assignable cause, such as poor workers or miscalibrated machinery. He pointed out that eliminating variability improves quality. His work created the foundation for today's statistical process control, and he is often referred to as the "grandfather of quality control" (World Meteorological Organization, 2013).

Dr. Armand V. Feigenbaum invented the concept of "Total Quality Control". He outlined the principles in 40 steps and adopted a total system approach to quality, the idea of a work environment where the management and employees have a total commitment to improve quality (Anwar, Hussein, Moosa, Faris).

Dr. Juran created many important methods and tools during his years, as he was the leading expert in the field of Quality Management. Dr. Juran highlighted that we must balance the attention and give importance to the tools we use in order to manage Quality. The Juran trilogy is made up of three important tools and they work together to help organization to realize the full benefits of Quality Management. Dr. Juran trilogy represents the concepts of Quality Planning, Quality Control and Quality Improvement (Anwar, Hussein, Moosa, Faris).

Phillip B. Corsby was a legend in the discipline of quality, who contributed significantly to management theory and quality management practices. Zero Defects, pioneered by Philip Crosby, is a business practice, which aims to reduce and minimize the number of defects and errors in a process and to do things right in the first time. The ultimate aim will be to reduce the level of defects to zero, however this may not be possible all the time as it means that everything possible will be done to eliminate the probability of errors or defects occurring. The overall effect of achieving zero defects is the maximization of profitability. The concept of zero defects can be used in any situation to improve quality and reduce cost, however the right conditions have to be established to allow this to take place. A process, system or method of working has to be established which allows for the achievement of zero defects (Anwar, Hussein, Moosa, Faris).

The successful pursuit of a quality programme requires the dedication of substantial organisational resources, and it is vital to understand whether and how this generates value for the organization. It is evident from the citation "focus on quality, not quantity" from Peoples Re-

public of China, 1996, that China, the world's largest emerging economy consisting of 1.2 billion potential consumers, is treating quality not just as an organisational issue but as a national one. Such a position reinforces the message that all organizations that want to survive and succeed must take quality seriously (Beckford 1998).

## 2.1 What is quality

When doing the theoretical research, the author found out that there are many definitions of quality and quality management. The most important and common factor is to fulfil the requirements to meet the customer's demands. According to the World Meteorological Organization (2013) there are many definitions of quality but they all have one element in common; the awareness of the variety to which a product or a service meets the customers expectations.

## 2.2 What is quality management

Quality management, QM can be defined in the following ways.

Quality management ensures that an organization, product or service is consistent. Quality management is focused not only on product and service quality, but also on the means to achieve it (Wikipedia 2016). According to Dale, van der Wiele & van Iwaarden (2013) there is an international definition of quality, the degree to which a set of inherent characteristics fulfils requirements. Irrespective of the context in which it is used, it is usually meant to distinguish one organization.

According to ICAO, Quality Management is a process that focuses not only on the quality of the product but also on the means to achieve it. It is centred on the following four activities - quality planning, quality control, quality assurance and quality improvement (World Meteorological Organization 2013).

According to the Finnish National Board of Education (2008), quality management aims to facilitate continuous improvement and development of operations and results. As quality management is such an intellectual topic within the industry, there is no exceptional or final solution for an organization on how to work with quality improvements (Finnish National Board of Education 2008).

In the following the most commonly used quality management and control techniques will be discussed (National Board of Education 2003).

### Quality audits

Quality audits are a methodical and independent interpretation to elicit whether the operations of the organization and the obtained results conform to the agreed arrangements, whether the organization operates effectively, and whether, in fact, it is well adapted to the purpose of attaining the set goals. By using quality audits made by an outside party, it is possible to support the systematic development of quality and to motivate the personnel to continuously strive to improve it.

#### Quality manual

By quality manual is meant a document describing the whole of the organizations operations. The planning and management of quality operations within the organization generally presuppose jointly agreed-upon principles and a documentation of work instructions that may be conveniently transmitted to the personnel in the form of a manual. The quality manual may also be used to present the activities and principles of the organization to an outside party, its customers or new employees.

#### Skills tests

The skills tests denote situations that are arranged in cooperation with working life to determine the student's level of practical vocational competence in the central skills areas of the training in hand. Working life and education experts are in charge of assessing the tests, whose main purpose it is to ascertain the effects of the training and learning that have been imparted at the workplace and in school.

#### Study commitments

In the study commitment may be put down the obligations of the student in attaining the educational aims of his training. Its first and foremost task is to support the student in coping with his studies to meet the set objectives. Commitments have, of late, been used quite successfully in vocational training. The personal study program of the student may be regarded as a form of study commitment too.

#### Service commitments

By service commitment is meant the quality assurance made by the provider of training to the customer, and on the basis of which the customer knows well in advance what manner of services he may expect from the provider. The quality strategy for public services recommends that service commitments are used in public administration. In the evaluation of the implementation of service commitments customer feedback has a key position. The service commitments may be included in the description of the service chains (National Board of Education 2003).

### 2.3 Quality management system

When doing the theoretical research, the author got information on how important it is to have a quality management system in place. According to BlackBelt (2011), the most important issue is to establish goals, and then to establish a process including a quality system on how to reach these goals to achieve the compliance.

Quality management system, QMS can be defined in the following ways.

The quality management system is a system that has been created to support quality management and that is made up of the structure, processes, resources, responsibilities and required managerial documentation of the organization. The quality system assists the organizer of training in methodically steering, managing, and developing the quality of training. Quality management and control techniques are tools used in quality management and by means of which it is possible to identify and describe targets that are in need of development. In addition, these tools can be used to ensure that the product, service, or activity fulfils the requirements that have been set. Various graphs, matrices, and analyses' are generally used as quality management and control techniques. Further various comparisons and quality audits made by an outside party are employed. The quality of services may also be controlled by commitments to study and personnel audits (National Board of Education 2003).

According to the SKYbrary (2013), a Quality System comprises the set of policies, processes and procedures required for the planning and execution of safe and efficient air operations. The system adds the various internal processes and enables the organization to identify, measure, control and improve the success and safety of its activities. The EU-OPS 1.035 requires that an operator shall establish one quality system and designate one quality manager to monitor compliance with procedures required to ensure safe operational practices. A quality system has to include a Quality Assurance Programme. This programme contains procedures designed to verify that all planned operations are being lead confidently in accordance with the requirements, standards and procedures. EU-OPS 1.035 requires also that the Quality Management System have to be described in a related documentation. According to Nasasira (2012), an approved training organization shall establish a quality system, which includes:

- a) An independent audit procedure to monitor training standards;
- b) The integrity of knowledge examinations and practical assessments; and
- c) Compliance with an adequacy of procedure.

## 2.4 Tools for Quality Management System, QMS

When doing the research, the author discovered that through a quality management system, the company will achieve the compliance for its training, which shows that the training fulfils the requirements. There are a lot of different quality management systems in the market, which enables the company to achieve its goals and objectives (Department of Trade and Industry). In the following section the most commonly used quality management systems and control methods will be presented and discussed.

### 2.4.1 Safety Management System, SMS

The Safety Management System, SMS is becoming a standard for the aviation industry around the world. According to the SKYbrary (2013), a Safety Management System, SMS is a systematic approach to managing safety, and is more than a regular manual. The aim of the Safety Management System, SMS is to control safety risks and thereby minimize them in operations. According to the International Air Transport Association, IATA (2016), approved training organizations are responsible for establishing a SMS.

### 2.4.2 Total Quality Management, TQM

Total Quality Management, TQM is used for quality improvement. According to Belokar and Gupta (2012), is Total Quality Management, TQM is an integrated management approach that aims to continuously improve the performance of products, processes, services in order to achieve and surpass customer's expectations. The Sitalgroup (2016) says that the Total Quality Management, TQM covers all the areas of the quality assurance and management. Below you can see their sketch.



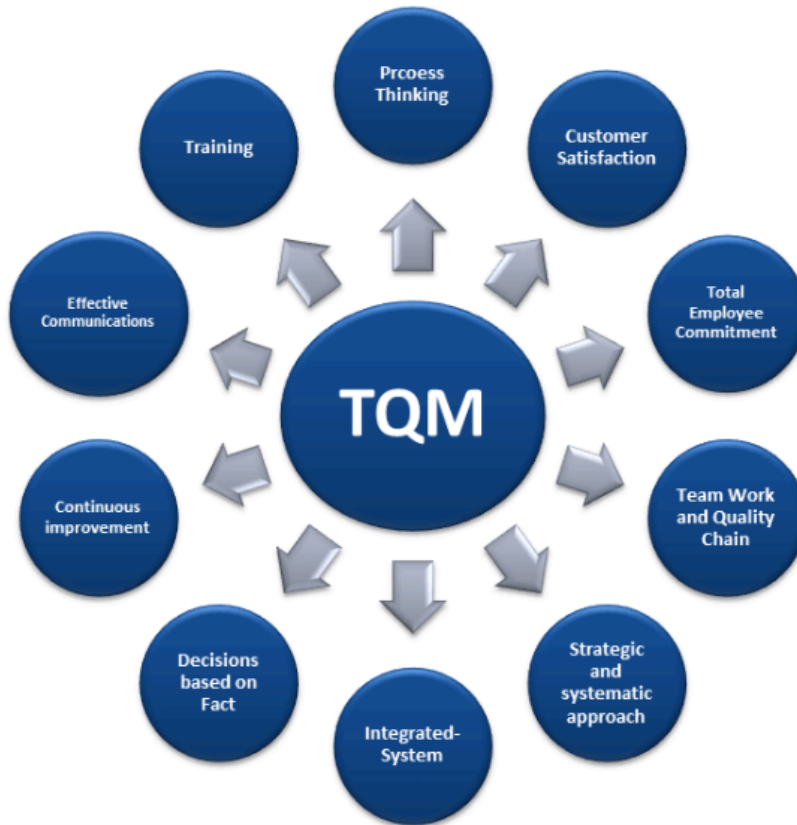


Figure 2: Total Quality Management (IMI Consultant 2016)

#### 2.4.3 Deming's PDCA (Plan-Do-Check-Act)

Deming's PDCA, also known as Deming circle/cycle/wheel or the Shewhart cycle is a four step management tool for carrying out change. As the PDCA circle has no end, the cycle should be repeated for continuous improvement. W. Edward Deming in 1950 suggested that business processes should be analysed and measured to identify sources of variation that causes the product to deviate from customer requirements. He recommended that business process should be placed in a continuous feedback loop so that managers can identify and change the part of process that needs improvement (Anwar, Hussein, Moosa, Faris).

#### 2.4.4 Standards

A standard can be defined as a document that highlights the requirements, specifications, guidelines and characteristic which is used to ensure that we:

- Achieve, maintain and continuously improve the service quality.
- Improve the quality of the operations in order to meet customers and stakeholders needs.
- Provide assurance to internal management, employees, customers and stakeholders that quality requirements are satisfied.

Below are the various quality standards on the basis of which quality management systems are built in the aviation industry.

#### ISO Standards

Over one million companies and organizations around the world are qualified to the ISO 9001 (ISO 9000 - Quality management 2015). It helps organizations to be well organized and improves customer satisfaction. Frequently checking and performing internal audits in the organization is a vital part of the ISO 9001:2015. At ProffsAviation the European Aviation Safety Agency, EASA and the Finnish Transport Safety Agency, Trafi are doing internal audits and checking the quality management system. Below you can see the 8 Principles of Quality Management according to Transition Support (2013).

<b>8 QM Principles</b>		
<b>1</b>	<b>Customer focused organisation</b>	Organisations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations
<b>2</b>	<b>Leadership</b>	Leaders establish unity of purpose and direction. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives
<b>3</b>	<b>Involvement of people</b>	People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit.
<b>4</b>	<b>Process approach</b>	A desired result is achieved more efficiently when activities and related resources are managed as a process.
<b>5</b>	<b>System approach to management</b>	Identifying, understanding and managing a system of interrelated processes as a system contributes to the organisation's effectiveness and efficiency in achieving its objectives.
<b>6</b>	<b>Continual improvement</b>	Continual improvement of the organization's overall performance should be a permanent objective of the organization.
<b>7</b>	<b>Factual approach to decision making</b>	Effective decisions are based on the analysis of data and information.
<b>8</b>	<b>Mutually beneficial supplier relationships</b>	An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

Figure 3: 8 Principles of Quality Management (Transition Support 2013)

International Air Transport Association, IATA, is an international industry trade group of airlines. The International Air Transport Association is the trade association for the world's airlines representing around 240 airlines which totals around 84% of the total air traffic. IATA supports many areas of aviation and assist the industry to formulate industry policy on critical airline issues. IATA has formulated the policy set below, which enables a safe, secure and sustainable air transport industry that connects around the globe:

#### Airport Slots

#### Benefits of Aviation

Cargo  
Charges & Economic Regulation  
Commercial Fuel Policy  
Environmental Policy  
Infrastructure Issues  
International Treaties  
Liberalization  
New Distribution Capability  
Passenger Rights  
Security  
Taxation

Skytrax is a United Kingdom based consultancy, which runs an airline and airport review and ranking site. Skytrax provides a professional and exclusive expertise to the world airline and airport industry through Audit and Service Benchmarking programmes of Product and Service Quality. It also conducts research for commercial airlines and carries out international traveller surveys to find the best cabin staff, airport, airline, airline lounge, in-flight entertainment system, on-board catering and several other elements of air travel. Skytrax holds an annual World Airline Awards and World Airport Awards as well as the ranking for airlines and airports (Anwar, Hussein, Moosa, Furis).

#### 2.4.5 Quality Management in airline agencies

When looking into the airline industry, to be able to get a better understanding on what quality management systems are being used, the author found out that the most common used systems in the training organizations are the ISO 9001 and the Safety Management Systems, SMS. As we can see below, quoting from the organizations websites, the airline industry uses the ISO 9001 and Safety Management System, SMS within the training organizations.

The European Aviation Safety Agency, EASA is committed to develop and monitor its own management standards and learn from international best practice. The agency ensures the compliance with the applicable management standards, namely EASA Management Standards that take into account ISO 9001 requirements and the Internal Control Standards of the European Commission. The EASA Integrated Management System (IMS), comprising a Quality Management System, is certified against the internationally recognised ISO 9001:2008 Quality Management Standard. Quality management concepts for the development of efficient processes help European public administration to strive for modernisation, better public management, increased performance and a stronger stakeholder focus (EASA 2016).

Lufthansa Flight Training is an ISO certified company and the concepts and procedures of its training courses are defined by severe quality assurance criteria. Lufthansa Flight Training implements the ISO 9001 international standard for quality management systems and is an Approved Training Organization in accordance with the European Air Crew Regulation (Lufthansa Flight Training 2016).

The Civil Aviation Authority, CAA has established and certified its organisational quality management system. This system shall also follow the requirements of ISO 9001:2008 Standard, and shall serve the CAA for a more effective and efficient implementation of the working processes. CAA identifies and describes the working processes, implements them, records their results and measures the implementation in comparison with planning and objectives. CAA has been awarded the certificate ISO 9001:2008 by Bureau Veritas, in April, 2013 (CAA 2016).

## 2.5 Quality manual

### 2.5.1 General - Quality manual

When doing the theoretical research, the author got a clear picture of how important it is to have a quality management system in place. This quality management system should include a quality manual showing and documenting that all activities are conducted according to the requirements. Stojanovic (2015) emphasizes that the quality manual presents the organization and its quality management system. A documented quality manual also gives an impression of an organization that knows what it is doing.

The training organization shall adopt and implement a suitable quality management system based upon requirements and standards set up by the aviation authority. The management system shall be controlled and periodically reviewed according to the stipulations in the quality manual. All personnel within the applicant training organization shall be made aware of their specific responsibilities and method of working. These shall be published in a quality manual, which includes an organizational chart. Responsibilities and methods of working shall be defined by job title, and personnel shall be allocated job titles in their terms of reference, which in turn refer them to the quality manual. Quality defined within the quality manual shall encompass all personnel functions within the training organization and shall include arrangements for control of documentation. Training organization personnel shall be familiar with relevant quality defined in the manual. The training organization shall have a person who responsible for the general management of the training operations, and for setting up and maintaining a documented Quality Management System satisfying the criteria contained within ISO 9001:2008. The aim of writing the manual is to answer two important questions - why ProffsAviation needs the training and quality manual and what are the requirements for the manual.

### 2.5.2 Definitions of a Quality manual

According to ISO 9001, the "quality manual" describes a quality management system and explains how it should work. This document details the corporate quality policy and structure of the company and references appropriate procedures. According to the Civil Aviation Safety and Security Oversight Agency, CASSOA (2009) is a quality manual a controlled document that forms the basis of the quality system. The manual includes the details of:

- a) The scope of the quality management system;
- b) The documented procedures and references for all quality assurance activities within that system;
- c) A description of the sequence and interaction of the processes included in the Quality Management System;
- d) Description of resources provided for the effective implementation of the quality system.

According to the Finnish National Board of Education (2008), a quality manual is a document specifying the quality management system of an organization. A quality manual may consist of several documented records and it aims to facilitate the daily work carried out within an education and training organization. Nowadays the same document is also referred to an operational manual.

### 2.5.3 Why ProffsAviation needs a quality manual

A training organization providing cabin crew training is required to have a training permit, for the initial training and the issuing of the cabin crew attestation, issued by the Finnish Transport Safety Agency Trafi. To receive this training permit, the training organization delivering cabin crew initial training needs to build up a training and quality manual, to show that all requirements are fulfilled and present them to the Finnish Transport Safety Agency Trafi. The manual can be a combination of these two. This training and quality manual has to be designed according to the European Aviation Safety Agency, EASA, requirements Part-CC in cooperation with the Finnish Transport Safety Agency, Trafi. ProffsAviation has decided to choose the combination of the training and quality manual when creating its own. The name of the manual will be Cabin Crew Quality Manual, CQM.

### 2.6 Requirements for ProffsAviation's quality manual

The manual will describe the way the training organization conducts its business and activities. As such, the manual will give guidelines to and act as a support instrument for the management and instructors when providing the training. It will also function as an essential document for the Finnish Transport Safety Agency Trafi, as they can check whether the training

organization is conducting its training in line with the existing requirements and accepted practices. The manual will contain the training programs and all relevant information needed for conducting a training course. Once the manual is created and approved by the Finnish Transport Safety Agency Trafi, ProffsAviation has to ensure that the training is performed according to the requirements and procedures stated in the manual. The manual will be the property of ProffsAviation, Finland. No part of the manual may be reproduced without a written permission from ProffsAviation. The contents of the manual recommended from the Finnish Transport Safety Agency Trafi will be the following:

0. Introduction including system of amendment and revision
1. Introduction of the training organization, responsibility areas, safety training including facilities and cabin crew training manual
2. The contents and the requirements of the initial training programme, subject presentation, test description and required standard of each subject
3. The contents and requirements of the instructor course, subject presentation, test description and required standard
4. Training documents
5. Approved instructors
6. The system of training records
7. Requirements for the cabin crew attestation and the issuing and suspension process
8. Quality policy and strategy including the quality assurance programme, quality audits, reporting system, monitoring and corrective actions, document control, management review and control of subcontractors

The manual is organized and structured according to recommendations by the European Aviation Safety Agency EASA, the International Civil Aviation Organisation ICAO and the Finnish Transport Safety Agency Trafi.

#### 2.6.1 The design and structure of the Cabin Crew Quality Manual, CQM

The Cabin Crew Quality Manual, CQM is consistent with the training organizations standards and policy. The CQM fulfils all requirements set up by the EASA EU No 965/2012 and Trafi. The manual contains general instructions, which must be known by the management and instructors, and is intended to be used as guidelines. The manual is written according to the instructions given by the Finnish Transport and Safety Agency, Trafi and the structure fulfils their requirements. The European Aviation Safety Agency, EASA terminology and clear language is being used in the manual. The writing style follows ProffsAviations requirements for writing and producing manuals so that the management and instructors can access it easily.

The revision process has been considered together with the Finnish Transport Safety Agency Trafi when designing the manual. The CQM complies with the requirements of the training organizations quality assurance system.

#### 2.6.2 Page structure

Each page of the CQM shall be identified as follows; the name of the organization, a unique identifier of the document to which belongs the page, the date of the revision (amendment or issue depending on the way the organization has chosen to revise the manuals), the chapter of the CQM, the page number, the name of the document such as "CQM - Cabin Crew Quality Manual".

#### 2.6.3 Validation

When the CQM is ready, it will be sent to the Finnish Transport Safety Agency, Trafi for a final review and approval. Trafi will ensure that all requirements set up by the European Aviation Safety Agency, EASA and the Finnish Transport Safety Agency, Trafi is included in the manual before confirming the approval.

#### 2.6.4 Deployment

ProffsAviation has built up a system to monitor the use of the CQM after it is published. The monitoring system will include corrections and suggestions for improvements.

#### 2.6.5 Amendment

ProffsAviation has developed an effective information gathering, review, distribution and revision control system to process information obtained from all sources relevant to the organization. The CQM will be reviewed on a regular basis (at least once a year) and after changes in safety regulations. When regulations and information changes, a revision will be issued and distributed to all persons who have a copy of the manual. Changes are indicated by revision bars (vertical black lines in the left margin next to the information that has been changed).

### 3 Contents of the quality manual

The contents of the manual recommended from the Finnish Transport Safety Agency, Trafi are described in the following chapters.

#### 3.1 Introduction including system of amendment and revision

In the first chapter in the Cabin Crew Quality Manual, CQM describes the way the training organization, ProffsAviation, conducts its accomplishments. The manual is an important document for the organization, as it provides the management and instructors clear guidance on

the policy of the organization, as well as the procedures and processes of ProffsAviation providing training.

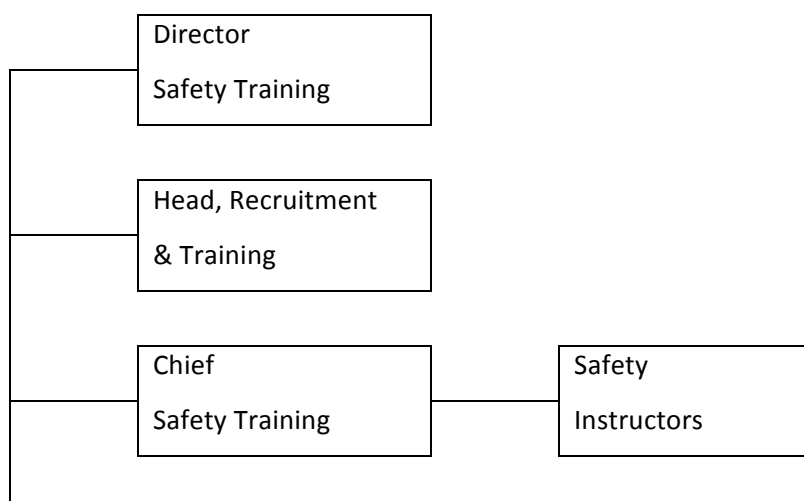
The manual is also a necessary document for the Finnish Transport Safety Agency, Trafi, as they can check whether the training organization is operating in line with the existing requirements and accepted practices. A large part of the surveillance activities of ProffsAviation is to ensure that the training organization is operating according to the regulations and requirements set by the European Aviation Safety Agency, EASA and the Finnish Transport Safety Agency, Trafi.

ProffsAviation has developed an information gathering system, review, distribution and revision control system to process information obtained from EASA relevant to the organization. By revision the training organization means that the CQM will always be up to date by the director of safety training if changes or news appear in safety regulations. When requirements and information changes, it is necessary to release a revision to all persons who have a copy of the CQM.

### 3.2 Introduction of the training organization, responsibility areas, safety training including facilities and cabin crew quality manual

Chapter 2 describes the training organization, responsibility areas, safety training including facilities and cabin quality manual.

ProffsAviation is a private independent cabin crew training organization in Finland approved by the aviation authority. Its primarily target market is airline operators that do not wish to establish their own or want to outsource their cabin crew initial safety training. The training organization and responsibility areas of ProffsAviation I described below.





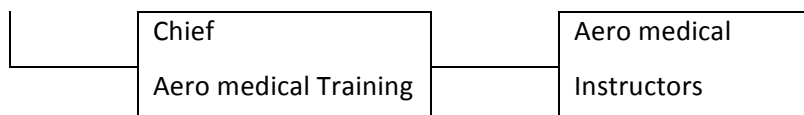


Figure 4: ProffsAviation training organization chart (ProffsAviation 2016).

The duties for the different responsibility areas will be found in the CQM chapter.

### 3.2.1 Safety training including facilities and cabin crew quality manual

ProffsAviation provides initial training in accordance with Part-CC Appendix1. The training program is approved by the Finnish Transport Safety Agency, Trafi in accordance with Part-CC Appendix1. The initial training is performed by personnel having the suitable background and experience in the area and qualified for the training elements to be covered. They may be recruited internally or externally depending on the individual experiences of the applicant.

The objective of ProffsAviation is to fulfil all relevant requirements, promote cost effectiveness in training and ensure that everyone involved in the training will understand the given information. ProffsAviation provides the Cabin Crew Quality Manual, which is a controlled document approved by the Finnish Transport Safety Agency, Trafi. The CQM contains the training programs and all relevant information needed for managing a training course. The guidelines of the training program and courses are presented in the CQM.

### 3.3 The contents and the requirements of the initial training programme, subject presentation, test description and required standard of each subject

Chapter 3 describes the objective of the course, which will give the students basic knowledge and practical skills necessary to perform operational duties as a cabin crew member in normal and emergency situations, and to form a qualification for conversion training to a specific aeroplane type and main subjects of the training. The main subjects of the training are:

- General theoretical knowledge of aviation and aviation regulations covering all elements relevant to the duties and responsibilities required from cabin crew
- Crew communication
- Introductory course on human factors, HF in aviation and crew resource management, CRM
- Passenger handling and cabin surveillance
- Aero-medical aspects and first-aid
- Dangerous goods in accordance with the applicable ICAO Technical Instructions

- General security aspects in aviation, including awareness of the provision laid down in Regulation (EC) No 300/2008
- Fire and smoke training
- Survival training.

During the training course the students will receive the Cabin Crew Handbook, CCH where the main subjects are presented and described. The training methods include classroom and distance instruction, self-study, presentations, group assignments, homework, Computer Based Training, CBT, and theoretical and practical instructions together with individual or collective practice, i.e. wet drills and fire-fighting training. It is very important to include the wet drill and fire-fighting drill, as it stands for a huge part within the Cabin Crew training and workload.

The duration of the course is approximately 80 hours, 11 days on daytime course or 19 days on evening course. More information about the schedule for both the daytime course and the evening course, and the approximate training hours for each subject can be found in the CQM Chapter 2.2 Subject presentation and Chapter 2.3 Course program. The tests within the training are done both practically and theoretically. It is very important that the student passes all the required tests within the training with at least 80% correct answers in the theoretical tests. The different types of theoretical tests can be found in the CQM in Chapter 2.5 Tests.

#### 3.4 The contents and requirements of the instructor course, subject presentation, test description and required standard

The chapter 4 describes the objective of the instruction course, which shall give the student knowledge of and skills in teaching methods, while making the student confident working as an instructor for the cabin crew initial training course. In addition, the instructors of Dangerous goods and Security- exercise shall receive special training in the subject fields.

Before participating in the basic instructor-training course, the student has to fulfil the specific requirements mentioned in the CQM Chapter 1. The main subjects for the basic instructor-training course are:

- Basic instructor skills
- Practical instructor skills.

More information about the requirements for each subject can be found in the CQM Chapter 3.2 Subject presentation.

The training and checking are led by the director of the safety training, or an instructor approved by the director of the safety training. The student shall show ability to work as an instructor and shall demonstrate practical instruction skills.

The duration of the basic instructor-training course is approximately 10 hours, and the course program can be found in the CQM Chapter 3.3 Course program.

### 3.5 Training documents

In the CQM Chapter 4 Training Documents, you can find all the essential documents and forms for the training. By these forms it is easier for the instructor to evaluate how the student is participating and managing in the training and tests, and also getting feedback from the student if the training was well enough.

### 3.6 Approved instructors

In the CQM Chapter 5 Instructors, you can find all the instructors within the training organization ProffsAviation, and their experience within the field. As an instructor for ProffsAviation's cabin crew initial safety training, it is very important to have the right amount of experience within the area, which was mentioned already in the CQM Chapter 1.3.1 Requirements and selection of instructors.

### 3.7 The system of training records

ProffsAviation's standards follow accurate and complete record keeping, as this is an important part of fulfilling the approval. The detailed student records are maintained to demonstrate that the requirements of the training course have been met. The student records and a copy of the CCA Attestation are kept for a minimum period of five years, except security training for ten years, after the completion of the training. In the CQM Chapter 6 Training records, you will find examples on the sample of the training record.

### 3.8 Requirements for the cabin crew attestation and the issuing and suspension process

A cabin crew member involved in commercial operation of an aircraft, shall be qualified and hold the related Cabin Crew Attestation, CCA. The cabin crew members holding the attestation are compliant with the applicable EU-OPS training requirements, or shall complete all required training and checking if they do not comply with the actual requirements of EU-OPS, or shall complete the initial training course and shall pass the related examinations as required if they have not operated in commercial operations by aeroplanes for more than five years.

The minimum age for the cabin crew member getting the cabin crew attestation is at least 18 years of age. The privileges of the cabin crew members holding a cabin crew attestation are to act as cabin crew members in commercial air transport operation of an aircraft. They also have to be competent enough to perform their duties in accordance with procedures specified in the operations manual, qualified to operate on an aircraft and have passed a medical check by an aeromedical examiner every fifth year.

### 3.8.1 The issuing and suspension process

The director of the safety training is responsible for issuing the cabin crew attestations to the cabin crew member candidates who have successfully passed the examination in accordance with requirements. ProffsAviation uses the format and specifications established by EASA when issuing the cabin crew attestations, which also can be found in the CQM Chapter 10.1 The model of ProffsAviation's Cabin Crew Attestation, CCA. In case of suspension of the cabin crew attestation the cabin crew member shall:

- Be informed in writing of this decision, and of their right of appeal in accordance with national law;
- Not exercise the privileges granted by their cabin crew attestation;
- Inform, without undue delay, the operator(s) employing the cabin crew member's services; and
- Return the cabin crew attestation in accordance with the applicable procedure established by the Finnish Transport Safety Agency, Trafi.

### 3.9 Quality policy and strategy including the quality assurance programme, quality audits, reporting system, monitoring and corrective action, document control, management review and control of subcontractors

ProffsAviation is committed to the highest standards of the training for its cabin crew member candidates. ProffsAviation ensures that all the instructors are responsible to train the cabin crew member candidates accordingly to the requirements, to meet the required standards. The director of the safety training holds overall responsibility for the quality assurance programme in cooperation with the Finnish Transport Safety Agency, Trafi. The quality assurance program assures that all the training are conducted according to the requirements and standards set up by EASA, Trafi and ProffsAviation.

#### 3.9.1 Quality audits

Quality audits are a systematic and independent comparison of the way the training is led against how it should be conducted. The audits are authority requirements set by the European Aviation Safety Agency, EASA and the Finnish Transport Safety Agency, Trafi. The appointed auditor plans each audit separately. The auditor shall prepare an audit checklist for each

audit. The checklist shall include all items required by the EASA and the Finnish Transport Safety Agency, Trafi. The planning documentation shall include:

- Auditee;
- Purpose/scope of audit;
- Reference documents;
- Auditors;
- Auditee representatives to be notified;
- Timeframe;
- Audit checklist(s).
- Any previous audits of the area in question shall be taken into account in audit preparation.

The auditee shall be notified at a minimum of one week in advance of an internal audit. Audits shall start with a pre-audit meeting and end with a post-audit meeting. The purpose of the pre-audit meeting is to present to the director of safety training the purpose of the audit, review the audit plan and present the audit team. A non-conformity is raised when there is evidence of failure to comply with an established and required standard and regulation. Based on the reference number and the agreed due date the director of safety training follows up the individual non-conformities. The adequacy of the corrective action shall be monitored during the next audit.

The purpose of the post-audit meeting is to present the preliminary results of the audit and to agree upon due dates for actions. Furthermore, the auditor will have the opportunity to make final corrections before delivering the report. A written audit is produced within two weeks of the post-audit meeting, and shall include:

- Unique audit reference number identifiable in the Audit Schedule;
- The auditee;
- Purpose/scope of audit;
- Reference documents;
- The auditors;
- Date(s) of the audit;
- A brief summary of the audit;
- Details of any non-conformity and other findings.

### 3.9.2 Reporting system

A system for reporting significant deviations has been established within ProffsAviation. The instructors will report important abnormalities by e-mail after each training session to the director of safety training. The reporting system is part of the internal control system, which has the purpose to keep the director of safety training informed about any abnormalities in the training standard and performance of the instructors, which also collect information for reporting deviations to the Finnish Transport Safety Agency, Trafi.

### 3.9.3 Monitoring and Corrective Action

The aim of monitoring is to ensure that the provided training fulfils the requirements and standards. The monitoring system is based upon quality inspections, external and internal audits, formal feedback from the management, instructors and students, corrective actions and follow-up. If there are any non-conformities found, corrective actions are taken to improve the safety training. The director of safety training has the final responsibility for establishing that corrective action has re-established the agreement with the appropriate requirement.

### 3.9.4 Document control

The primary purpose of the document control is to ensure that necessary, accurate and up-to-date documents are available to the personnel required to use it. ProffsAviation uses an electronic system for the document control. The CQM is created and revised also electronically, but there is also a master copy at the office.

### 3.9.5 Management quality review

An element of the quality assurance at ProffsAviation is to improve recurrently. The director of safety training and the instructors will hold a management quality review at least once a year, to ensure that corrective and preventive actions have been implemented and are being monitored for continual improvement.

The director of safety training is responsible to produce a Management Quality Report, MQR for the management quality review. The MQR is a complete, systematic documented review of the training standards that consider the following:

- the result of inspections, audits and any other indicators
- the result from the feedback system/instructor evaluation forms
- the overall effectiveness of the company in achieving stated objectives.

The MQR is designed to identify and correct trends, and to prevent future non-conformities. Regular meetings are held at least once a year with the instructors in connection with the management quality review.

#### 3.9.6 Control of subcontractors

Subcontractors shall always be evaluated and selected on the basis of their capability to meet the requirements of the European Aviation Safety Agency, EASA and the Finnish Transport Safety Agency, Trafi. ProffsAviation has the general responsibility for the training provided by the subcontractor, which shall also be monitored and audited regularly. A list of ProffsAviation's subcontractors can be found in the CQM Chapter 5 Instructors.

### 4 Discussion & Conclusions

Expertise on quality assurance of the author has developed substantially, which also impacted the final result of the Cabin Crew Quality Manual, CQM. The author has worked in a very professional environment within the airline industry. According to Aaltela (2016) the quality system of a cabin crew training organization doesn't currently have the requirements of the regulation concerning cabin crew training. Instead the Finnish Transport Safety Agency, Trafi direct the international provider of the cabin crew training to have a quality management system. According to the Finnish Transport Safety Agency, Trafi the cabin crew training organization should have a quality control programme to ensure the training according to the instructions.

Most airlines use the Safety Management System, SMS to manage the safety training and control safety risks in operations. The European Aviation Safety Agency, EASA uses the ISO Standards, as does the airline Lufthansa's training organization. ProffsAviation has hence chosen to use a quality system constructed on both the Safety Management System, SMS, and the ISO Standards, to facilitate the training for both the instructors and the students, not to mention the auditors of the training.

#### 4.1 Own working process

The working process has been developing well, as the author was extremely well prepared with the previous projects and research. The author is satisfied with the project manager at ProffsAviation, the Director, safety training, as she could answer questions and give her professional advices to the Cabin Crew Quality Manual, CQM. The mentor at Laurea UAS has been there to answer questions always when desired, and helped through with the thesis work. The knowledge within the area has improved significantly, and this will also be an excellent benefit for the future. The Cabin Crew Quality Manual, CQM gives ProffsAviation the chance to dedicate to the highest standards of the training for its cabin crew member candidates, as

the training conducts in accordance with applicable requirements, standards and procedures. ProffsAviation uses now the Quality Assurance System to guarantee the highest standards of the training.



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## Figures

Figure 1: The mission of ProffsAviation

Figure 2: Total Quality Management

Figure 3: 8 Principles of Quality Management

## Tables

Table 1: The values guide, the behaviour and the way the business is conducted (ProffsAviation 2016)

