

INTERNATIONAL CIVIL AVIATION ORGANIZATION Fourth Meeting of AFI Region Directors General of Civil Aviation (DGCA/4) (Matsapha, Manzini, Swaziland, 8 to 9 November 2010)

Agenda Item 2: Aviation Safety

Training Profiles and Corresponding Required Training to Meet ICAO Safety Oversight Obligations for Qualified Technical Personnel

(Presented by U.S. Federal Aviation Administration)

SUMMARY

The United States Federal Aviation Administration (FAA) has developed training profiles for its inspectors as a standardized tool to assess the training needs and required resources to ensure the technical proficiency of inspectors involved in safety oversight and surveillance of aircraft operations. The training profiles developed by the FAA can be utilized by other civil aviation authorities as a tool in support of ICAO Safety Oversight Manual Part A (Doc 9734 AN/959) Section 3.5.2 on training of technical personnel. The development of training profiles and subsequent exchange of information on training opportunities is being conducted in conjunction with other regional entities.

TRAINING PROFILES AND CORRESPONDING REQUIRED TRAINING TO MEET ICAO SAFETY OVERSIGHT OBLIGATIONS FOR QUALIFIED TECHNICAL PERSONNEL

1. **INTRODUCTION**

1.1 The FAA's Flight Standards Service has pursued the development of various cost effective tools for use by other civil aviation authorities (CAAs) to enhance aviation safety worldwide. As the world's largest CAA, the FAA has recognized that ensuring adequate numbers of technically proficient inspectors is one of the largest contributors to effective oversight. The FAA's Flight Standards Service has developed training profiles to assist in the management of training new and existing inspectors and has used these profiles as an integral part of effective resource planning, scheduling, and the verification of training competencies. The standardized and modular training profiles have been key to the FAA's implementation of ICAO guidance outlined in their ICAO Safety Oversight Manual Part A (Doc 9734 AN/959) Section 3.5.2 on Training of Technical Personnel. With the maturation of training profiles, the Flight Standards Service is prepared to share its inspector profiles with the CAA community. Although they are currently focused on technical personnel, profiles can be easily expanded to cover all civil aviation authority personnel.

2. **DISCUSSION**

2.1 The FAA's Flight Standards Service has noted that one of the key challenges to sustaining the effective safety oversight of air operations has been to maintain a consistent level of technical proficiency within the pool of inspectors. As changes are made to the inspector workforce resulting from variations in CAAs' resources, oversight capabilities may vary significantly over time. Frequently, CAAs that have undergone an FAA International Aviation Safety Assessment (IASA) or

an ICAO Universal Safety Oversight Audit Programme (USOAP) review have subsequently received the necessary resources and support to improve the number and capabilities of the inspector workforce. However, ensuring consistent proficiency over time has become a challenge. The ICAO Safety Oversight Manual Part A (Doc 9734 AN/959) Section 3.5.2 (Training of Technical Person) outlines that state authorities must identify and support qualifications of technical personnel performing safety oversight functions on an ongoing basis.

To maintain a high level of technical proficiency, the FAA has developed the Training Needs Assessment System (TNA) that continually assesses training needs of inspectors and all other personnel. Included in the system is the ability to identify current and future training requirements.

Although a large and extensive automated system like TNA may not be required or even feasible for all authorities, standardized training profiles can be useful to all CAAs. Standardized profiles provide a means to consistently assess, track and plan training needed to support an adequate pool of qualified technical personnel. The standardization of these profiles also improves the consistency of inspections within a country or region, and perhaps even globally if standardized at an international level. Figure 1 below provides an example of a training profile outlining core courses required by all FAA Flight Standards personnel, and those modules that are position specific. The example provided shows the training profile for an air carrier airworthiness inspector. Note that the training profile covers the entire spectrum of training for a new hire.

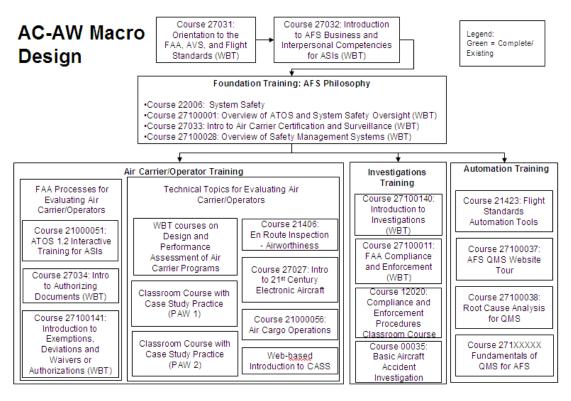


Figure 1 – Air Carrier Air Worthiness Inspector Profile

The top of the profile shows the requisite training for all FAA Flight Standards Service personnel, which includes orientation, introduction and safety philosophy courses. The three areas under the foundation training are those areas specifically required for, in this case, an air carrier airworthiness inspector. In addition to the three technical training areas, other modules may be added depending upon the responsibilities of the individual inspector.

As is the case with many CAAs, the FAA is challenged with an environment of limited resources, and has been seeking improvements in the cost effectiveness of maintaining a proficient pool of technical personnel. A key way the Flight Standards Service is improving cost effectiveness is by utilizing a variety of training methods, or a "blended approach." This approach entails traditional classroom and on-the-job training (OJT), including distance and web-based learning methods. This blended approach provides additional flexibility for scheduling and reducing costs linked with more traditional training methods. Using the blended approach, the FAA has reduced the time and resources needed for training.

During recent bilateral discussions with other aviation authorities, the FAA outlined its training profile system, which was warmly received. Since that time, there has been increasing interest by other CAAs regarding standardized training profiles for inspectors. In response to increasing interest, the FAA introduced a cooperative effort on sharing training profiles during recent meetings in Asia. In addition to the profiles, the working group also discussed sharing schedules of courses offered in the region that may be opened to inspectors from other CAAs. The regional sharing of course availability would assist in reducing the cost of developing and administering required courses in a timely fashion, especially when the number of qualified inspectors is limited. As a part of the effort to increase the availability of courses to other CAAs, the FAA Flight Standards Service is in the process of making available some of its web-based courses to non-FAA personnel through a service called "Blackboard", which will be externally accessible.

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to:

- a) Participate in discussions and cooperation on the development and use of standardized training profiles as an effective way to meet ICAO Safety Oversight Manual Part A (Doc 9734 AN/959) Section 3.5.2 (Training of Technical Personnel); and
- b) Assess the value of standardizing training profiles to enhance technical proficiency of technical personnel on a regional or global scale, and enable regional training approach development to enhance timely and cost effective training opportunities.