

**FAA Flight Standards**

**Hiring and Training  
Guidelines for  
Aviation Safety  
Inspectors of the  
Flight Standards  
Directorate**

**2016 Asia-Pacific  
Flight Standards Meeting**

**July 19-21, 2016  
Washington, DC USA**

**2016 ASIA PACIFIC  
FLIGHT STANDARDS MEETING**  
JULY 19-21, 2016



# Training Guidelines for ASIs

- **Concept initially developed by FAA through the APEC TPTWG Aviation Safety Sub-Group.**
- Now FAA is working with ICAO and regional CAA training organizations to implement this world-wide
- **Hiring and Training Guidelines** address:
  - the foundation for CAA training;
  - qualifications for recruitment of ASIs;
  - ASI position descriptions based on job tasks/areas of oversight responsibility;
  - Competency-based training and assessment;
  - Inspector training courses;
  - Conducting and evaluating On the Job Training (OJT)
  - Examples of PDs; job tasks, job task analysis worksheet template, inspector training profiles, and OJT worksheets.

**Hiring and Training Guidelines  
for Aviation Safety Inspectors  
of the Flight Standards  
Directorate**



# Need for ASI Training Guidelines



- After a review of Aviation Safety Inspector (ASI) course offerings in various regions and information from ICAO USOAP and FAA IASA, it is clear that many authorities found training and maintaining safety inspectors is an ongoing challenge.
- A lot of training is ad hoc and not uniform between CAAs and within CAAs.



# 8 Critical Elements of a Safety Oversight System

## ICAO Document 9734 Part A

ICAO USOAP audits continue to show that of the 8 critical elements of a safety oversight system, Critical Element 4: Qualification and Training of Technical Personnel has been the most challenging for CAAs to meet.

CE-8 Resolution of Safety Concerns

CE-7 Surveillance Obligations

CE-6 Licensing, Certification

CE-5 Technical Guidance

CE-4 Qualified Technical Personnel & Training

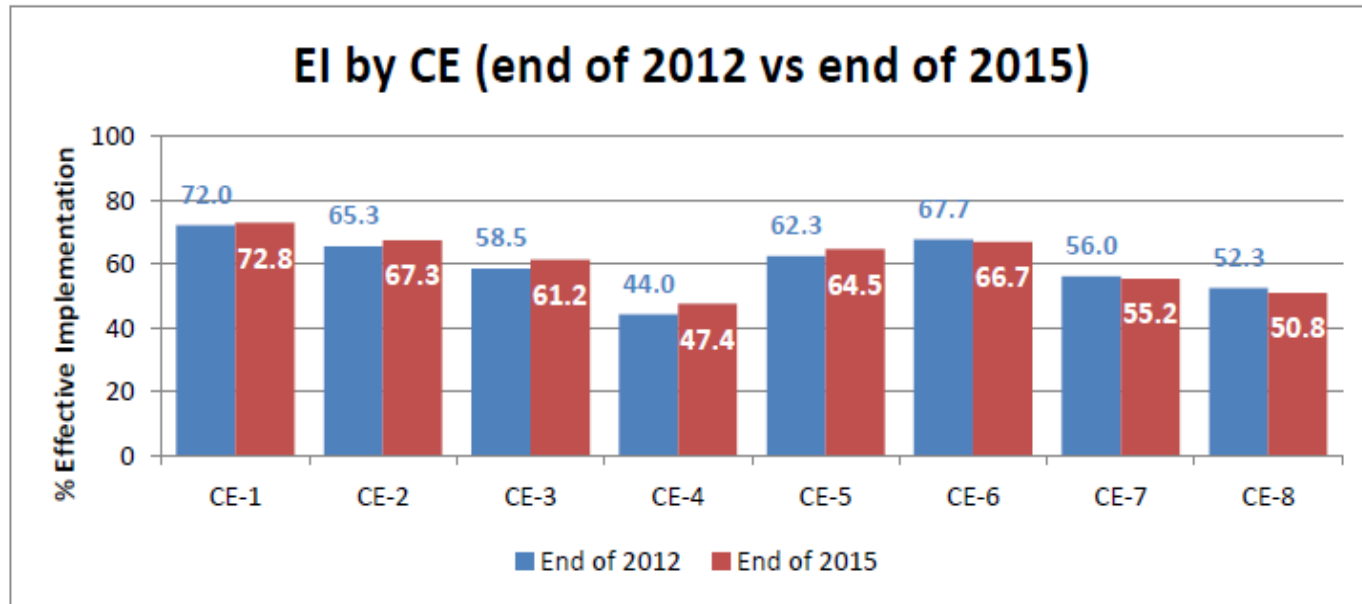
CE-3 CAA Structure & Oversight Functions

CE-2 Specific Operating Regulations

CE-1 Primary Aviation Legislation



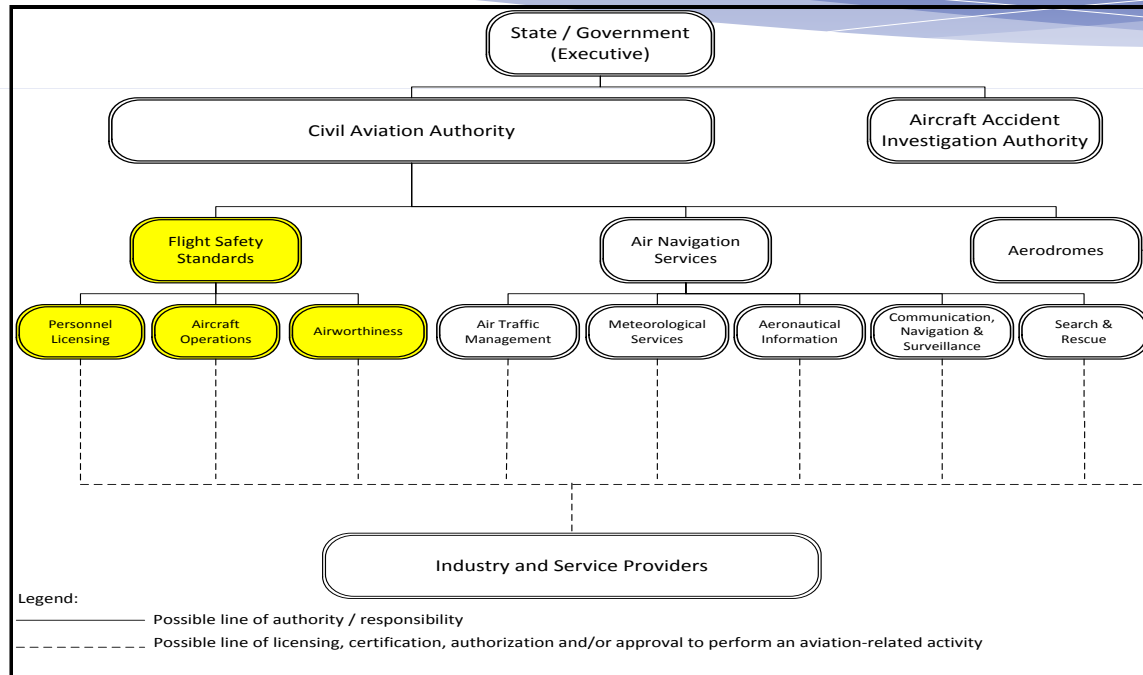
# Technical Personnel Qualification and Training



**Hiring and training guidelines for ASIs will provide a means to promote a minimum level of technical capabilities of technical personnel providing safety oversight worldwide.**



# Foundation for CAA Training



## ICAO Requirements for:

- **CE-1: Primary Aviation Legislation**
- **CE-2: Specific Operating Regulations**
- **CE-3: CAA Structure and Organizational functions**
- **CE-4: Qualified Technical Personnel and Training**



# Qualification Standards for Inspectors

- Qualification Standard – A description of the minimum requirements necessary to perform work of a particular occupation successfully and safely.
- These minimum requirements may include specific job-related work experience, education, medical or physical standards, training, security, and/or licensure.

|            | Emerging Inspector Classification and Specialization |             |                   |          |              |
|------------|--|-------------|-------------------|----------|--------------|
| Operations | Airworthiness  | Licensing   | Flight Simulation | Dispatch | Cabin Safety |
|            | Avionics   | Flight Crew |                   |          |              |
|            |  | Maintenance |                   |          |              |
|            |  | Examiner    |                   |          |              |
|            |  | ATO         |                   |          |              |



# Position Descriptions for Inspectors

Position Description – A document which lays out an employee's major duties, responsibilities, organizational relationships, scope of work, and amount of supervision when performing job tasks.

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Operations – new hire</li><li>• Operations – Principal</li><li>• Aircraft Dispatch – new hire</li><li>• Aircraft Dispatch – Journeyman</li><li>• Cabin Safety – new hire</li><li>• Cabin Safety – Journeyman</li><li>• Flight Simulation</li><li>• Helicopter - Principal</li></ul> | <ul style="list-style-type: none"><li>• Airworthiness – new hire</li><li>• Airworthiness – Principal</li><li>• Avionics – Principal</li><li>• Licensing – Examiner</li><li>• Licensing – ATO</li><li>• Operations Unit Supervisor</li><li>• Airworthiness Unit Supervisor</li><li>• Office Manager – Supervisor</li></ul> |
|---|---|





# Example of Position Description

## Operations ASI - Principal

### 1a. Flight Operations Inspector - Principal Operations Inspector

#### I. POSITION SUMMARY

The Principal Operations Inspector functions as the primary operations interface between assigned air operators and the Civil Aviation Authority (CAA). Has programme responsibility to assure that assigned air operators meet Civil Aviation Regulations with respect to operations programmes. Determines the need for and establishes work programmes for surveillance and inspection of assigned organisations within manpower and budget limitations to assure adherence to the applicable regulations.

#### II. DUTIES AND RESPONSIBILITIES

##### A. Technical Administration

Assures on a continuing basis that assigned organisations are properly and adequately organized, staffed, and equipped; have and conduct an adequate training programme, including an acceptable record keeping system; and have facilities and procedures that meet all regulatory requirements. Chairs joint CAA-industry meetings; maintains regular contact with organisations assigned; and coordinates with top management officials. Requires or directs correction of any deficiencies/discrepancies and refuses or withdraws approval if they cannot be resolved.

Is responsible for the conduct of enforcement investigations and preparation of final reports and recommendations. Performs or supervises the emergency suspension of certificates or cancellation of operations specifications.



# Training of ASIs once hired by the CAA

- ICAO require initial, continuing and practical training on ASI assigned job tasks.
- On the Job (OJT) training has three levels, which will be recorded on an inspector's OJT worksheet.

## Level I: Knowledge →

Classroom or web based training according to an ASI Training Profile.

## Level II: Understanding →

Practical – observing the conduct of a job task, providing some assistance. Will use an Job Task Analysis (JTA) worksheet.

## Level III: Performance →

Practical – ASI performs the job task independently under supervision. When satisfactory no further OJT required.



# Example of Courses to Build an Inspector Training Profile

## Suggested Flight Standards Directorate Inspector Training Profiles

| CAA Course Number  | CAA Training Course   | Subject Area                | Operations | Airworthiness/<br>Maintenance | PEL - OPS/MX |
|--|---|-----------------------------|------------|-------------------------------|--------------|
| <b>INITIAL TRAINING FOR ALL AVIATION SAFETY INSPECTORS</b> |   |                             |            |                               |              |
|  | New Hire Employment Orientation (Benefits, Ethics, Conduct, Discipline, Travel, Security, Unions, etc.) | General Admin/Technical     | X          | X                             | X            |
|  | Intro to ICAO and CAA Overview  | General Admin/Technical     | X          | X                             | X            |
|  | Aircraft Accident Investigation   | Resolution of Safety Issues | X          | X                             | X            |
|  | Compliance and Enforcement Procedures   | Resolution of Safety Issues | X          | X                             | X            |
|  | Crew Resource Management Introduction   | Certification - AOC         | X          |                               | X            |
| 18700 - ICAO TRAINAIR STP                                  | ICAO GSI Air Operator Certification - OPS   | Certification - AOC         | X          |                               | X            |
| 18701 - ICAO TRAINAIR STP                                  | ICAO GSI Air Operator Certification and AMO Certification - Airworthiness                               | Certification - AOC and AMO |            | X                             | X            |



# Example of a Job Task Analysis Worksheet

JOB TASK ANALYSIS WORKSHEET

|  |   |                                 |                               |
|--|---|---------------------------------|-------------------------------|
| <b>Title:</b>                                  | Issue A Pilot Certificate Based On Military Competence Under MCAR Part 2: 2.2.3.1 |                                 |                               |
| <b>Number:</b>                                 | 4.14  | <b>Validation Date:</b> 5/18/05 | <b>Approval Date:</b> 7/25/05 |
| <b>Comments:</b>                               |   |                                 |                               |
| <b>Job Task Sponsor:</b>                       | Meravia CAA Flight Standards Directorate, Operations Division                     |                                 |                               |
| <b>Job Series:</b>                             | Aviation Safety Inspector –Flight Operations                                      |                                 |                               |
| <b>Function:</b>                               | 4.0 Personnel Licensing   |                                 |                               |
| <b>Duty:</b>                                   | 4.14. Issue a Pilot License based on Military Competency                          |                                 |                               |
| <b>Rating and Ranking</b>                      |   |                                 |                               |
| <b>Difficulty:</b>                             | Low   |                                 |                               |
| <b>Importance:</b>                             | Non-Critical  |                                 |                               |
| <b>Time to Accomplish:</b>                     | 1 Hour  |                                 |                               |
| <b>Specialty</b>                               | <b>Frequency</b>  |                                 |                               |
| OPS  | On Demand   |                                 |                               |
| PEL  | On Demand   |                                 |                               |
| <b>Course Numbers</b>                          |   |                                 |                               |
| 18710  |   |                                 |                               |
| <b>WTS Activity Codes</b>                      |   |                                 |                               |
| 1532   |   |                                 |                               |
|  |   |                                 |                               |
| <b>Regulatory Requirements</b>                 |   |                                 |                               |
| MCAR Part 2: 2.2.3.1; IS: 2.2.3.1; 2.3.5; 2.11 |   |                                 |                               |

JOB TASK ANALYSIS WORKSHEET

|  |   |                     |                     |                    |                                      |                   |                                       |
|--|---|---------------------|---------------------|--------------------|--------------------------------------|-------------------|---------------------------------------|
| <b>Job Aids</b>  |   |                     |                     |                    |                                      |                   |                                       |
| None   |   |                     |                     |                    |                                      |                   |                                       |
| <b>Other Guidance</b>  |   |                     |                     |                    |                                      |                   |                                       |
| MD-30, PEL Inspector Handbook, Chapter 11<br>MD-KTG-002 Commercial Pilot Knowledge Test Guide<br>MD-STG-007 CPL Aeroplane<br>MD-STG-008 CPL Airship<br>MD-STG-009 CPL Glider<br>MD-STG-010 CPL Helicopter<br>MD-STG-011 CPL Glider |   |                     |                     |                    |                                      |                   |                                       |
| <b>TASK DESCRIPTION:</b>   | Determine an applicant's eligibility for a pilot certificate and/or rating based on military competence and issue the appropriate pilot certificate.  |                     |                     |                    |                                      |                   |                                       |
| <b>SUBTASK 1:</b>  | Determine applicant's eligibility.  |                     |                     |                    |                                      |                   |                                       |
| <b>Objective / Skill:</b>  | <table border="1"> <tr> <td><b>Performance:</b></td> <td>Review application.</td> </tr> <tr> <td><b>Conditions:</b></td> <td>Submitted application.</td> </tr> <tr> <td><b>Standards:</b></td> <td>IAW MD-30, Chapter 11 and MCAR Part 2</td> </tr> </table>          | <b>Performance:</b> | Review application. | <b>Conditions:</b> | Submitted application.               | <b>Standards:</b> | IAW MD-30, Chapter 11 and MCAR Part 2 |
| <b>Performance:</b>  | Review application.   |                     |                     |                    |                                      |                   |                                       |
| <b>Conditions:</b>   | Submitted application.  |                     |                     |                    |                                      |                   |                                       |
| <b>Standards:</b>  | IAW MD-30, Chapter 11 and MCAR Part 2   |                     |                     |                    |                                      |                   |                                       |
| <b>Knowledge:</b>  | <ul style="list-style-type: none"> <li>Understand the Regulatory Requirements contained in MCAR Part 2</li> <li>Understand the Guidance and Policy contained in MD—30, Chapter 11</li> </ul>  |                     |                     |                    |                                      |                   |                                       |
| <b>SUBTASK 2:</b>  | Issue the appropriate licence and rating.   |                     |                     |                    |                                      |                   |                                       |
| <b>Objective / Skill:</b>  | <table border="1"> <tr> <td><b>Performance:</b></td> <td>Issue licence.</td> </tr> <tr> <td><b>Conditions:</b></td> <td>Applicant met eligibility standards.</td> </tr> <tr> <td><b>Standards:</b></td> <td>IAW MD-30, Chapter 11 and MCAR Part 2</td> </tr> </table> | <b>Performance:</b> | Issue licence.      | <b>Conditions:</b> | Applicant met eligibility standards. | <b>Standards:</b> | IAW MD-30, Chapter 11 and MCAR Part 2 |
| <b>Performance:</b>  | Issue licence.  |                     |                     |                    |                                      |                   |                                       |
| <b>Conditions:</b>   | Applicant met eligibility standards.  |                     |                     |                    |                                      |                   |                                       |
| <b>Standards:</b>  | IAW MD-30, Chapter 11 and MCAR Part 2   |                     |                     |                    |                                      |                   |                                       |
| <b>Knowledge:</b>  | <ul style="list-style-type: none"> <li>Understand the Regulatory Requirements contained in MCAR Part 2</li> <li>Understand the Guidance and Policy contained in MD—30, Chapter 11</li> </ul>  |                     |                     |                    |                                      |                   |                                       |



# Example of an ASI OJT Worksheet

| Inspector Training Profile Worksheet              |   |               |         |          |         |          |         |          |
|---|---|---------------|---------|----------|---------|----------|---------|----------|
| Inspector Name:                                   |   |               |         |          |         |          |         |          |
| Air Operations – Certification and Authorisations |   |               |         |          |         |          |         |          |
| Task  | Description   | Course Number | Level 1 |          | Level 2 |          | Level 3 |          |
|   |   |               | Date    | Initials | Date    | Initials | Date    | Initials |
| 2.002   | Conduct Cert Phase II: Formal Application Phase           |               |         |          |         |          |         |          |
| 2.003   | Conduct Cert Phase III : Document Compliance Phase        |               |         |          |         |          |         |          |
| 2.004   | Conduct Cert Phase IV: Demonstration and Inspection Phase |               |         |          |         |          |         |          |
| 2.005   | Conduct Cert Phase V: Certification Phase                 |               |         |          |         |          |         |          |
| 2.006   | Obtain Certificate Number for an Air Operator             |               |         |          |         |          |         |          |
| 2.007   | Issue or Amend or cancel Operations specifications        |               |         |          |         |          |         |          |



# Aviation Safety Inspector Training

## Next Steps:

- Hiring and Training Guidelines are undergoing final peer review
- Will be available on FAA web site:
  - Will also have listing of FAA courses and corresponding job tasks taught
- Encourage other CAAs to identify courses for international use
- Partner with established training centers for AFS inspector curriculum delivery



**Thank you.**

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