Inspector Competency Building Framework (ICBF) course

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Mochamad HISYAM
Jakarta, Indonesia, 5-7 May 2020
Course Objectives

- Provides guidance for States to develop a training programme in compliance with ICAO requirements;
- Provide States with the guidance to improve CE-4 effective implementation scoring by increasing the number of qualified inspectors;
- Improving the safety oversight function.
Course Structure

Modules 1, 2
Introduction of ICBF

Module 3, 4, 5, 6, 7
Training Program Implementation

Module 8, 9, 10
OJT & Training Record System

Module 11
Next Steps
Course wrap-up
Methodology

Presentation by the facilitator

Exchange of experiences

Interactive discussions
Administrative Notes

- Registration form
- Punctuality
- Participation
- No phones, but use your laptop
- Feedback form
Module 1

International Obligation
Article 37: National Law

Each State will develop a National Air Law in accordance with the ICAO SARPs
The National Air law

Should Provide for Proper:

- Creation of CAA
- Promulgation of regulations
- Regulation of industry
- Enforcement
These Job Functions are accomplished by Inspectors

- CAA Authority:
  1. Develop regulations
  2. Issue AOCs, etc
  3. Conduct inspections
  4. Take corrective action
ICAO: Inspector Staffing

- Must be properly organized
- Competent
- Qualified

Doc 8335, Part I, Par. 5.3
Doc 9760, Part II, Par. 3.1.3
Doc. 9734, Part A, Par 3.4.2
ICAO: Inspector Staffing

“The State civil aviation system must be **properly organized** and staffed with **qualified personnel** capable of accomplishing the required wide range of technical duties involved in safety oversight”

ICAO Doc. 9734, Part A, Par. 3.4.2.1
ICAO: Inspector Duties

- Certification of operators
- Continuing surveillance of operators
- Personnel licensing
- Informing the CAA and operator of deficiencies
- Recommending corrective action

Doc 8335, Part I, Par. 5.2 & 5.4
Doc 9760, Part II, Par. 3.1
ICAO: Inspector Responsibilities

- Vital importance
- Perform a critical job function
- Essential to aviation safety
- Essential to meeting State ICAO Obligation

Doc. 8335, Part I, Par. 5.4
Doc. 9734, Part A, Par. 3.5.1
ICAO: Inspector Quality

“The satisfactory execution of the various functions of the CAA Inspectorate depends to a large extent on the qualifications, experience, competence and dedication of individual inspectors”

Doc 8335, Part I, Par. 6.2.6
CAA Inspectors should compare favorably with the personnel they will inspect.

Doc 8335, Part I, Par. 6.2
Inspector Pay

- Consistent with education & technical experience.
- Comparable to industry personnel.
- The CAA must be a competitive employer.

*ICAO Doc. 9734, Part A, Par. 3.4.2*
Inspector Cost

- Inspectors represent the CAA.
- The CAA must be prepared to finance inspector initial and recurrent training.

“The cost of recruiting, retaining and training inspectors who satisfactorily meet the requirements of the profession represents a significant financial commitment and may require revisions to long-standing policies and regulations regarding remuneration for qualified technical personnel.”

ICAO Doc. 9734, Part A, Par. 3.4.2
ICAO Doc. 9734, Part A, Par. 3.5.2
ICAO: Required Training

The CAA must:

- Determine the minimum qualifications for new-hire personnel;
- Provide the training necessary to accomplish their responsibilities;
- Initial & Recurrent;
- Technical & Administrative.

ICAO Doc. 9734, Part A, Par. 3.5.2
ICAO: Inspector Training

- Continuous development knowledge & skill
- All inspector duties & responsibilities
- CAA regulations, procedures, enforcement
- Refresher courses in all responsibilities
- Participation in seminars & workshops
- Technical report writing
- Supervisory training
“The result of such training is better job performance and greater respect from those who are inspected and supervised by the CAA”

ICAO Doc. 9734, Part A, Par. 3.5.2
Inspector Development Concept

CAA Inspectors

Qualification

Training

Government Officer / Industry Professionals

Start
Any Question?

Module 1
Module 2
ICBF Overview
ICBF System

- Complete system
- Built on best practices of CAA
- Complies with ICAO
- Complies with IASA
5 (five) Main Component

- Program Guide
- OJT Guide
- Formal Course Standards
- Job Task Analysis
- Training Record System
Program Guide

- Describes the requirements, objectives, and procedures for operation of the Inspector Competency Building Framework (ICBF)
- Inspector training profile
- Positions descriptions
OJT Guide

- Detailed procedures for the conduct of on-the Job Training
- 3-Phase OJT system implementation
- 3-Levels OJT delivery process
- Instructions for Training Record Software
Formal Course Standards

- Describes the course description, and minimum requirements for all formal classroom style inspector training courses
Job Task Analysis

- A detailed inventory of the requirements associated with each technical Job Task
- Separate listing for OPS Inspector, AIR Inspector, PEL Inspector, ANS Inspector, AGA Inspector, AIG Investigator, etc.
- Description of the task, required supporting documents, and a step-by-step listing of the subtasks that must be performed to accomplish the task
Training Record

- An internet database or Inspector worksheet profile record that is used to record all training completed in the ICBF.
Any Question?
Module 2
Module 3
Training Policy
What is Policy?

- Wise, expedient, or prudent conduct or management
- A principle, plan, or course of action
Training Policy

- Commitment to develop Inspectors through training
- In job functions
- From new hire to retirement
- To fulfill:
  - CAA mission
  - State ICAO requirements
  - Gain industry compliance
  - Safeguard the traveling public
Roles and Responsibility of CAA

All 6 roles must work together to successfully implement the policies of the ICBF
Any Question?
Module 3
Module 4
New Hires Inspector
New Hire Requirements

❖ General requirements
❖ Specific requirements
ICAO: New Hire – General Characteristics

- Technical Competency
- Integrity, Impartial
- Initiative, Tact, Tolerance, Patience
- Good understanding of human nature
- Good communications skills
ICAO: New Hire – General Technical Requirements

- Broad air transport background: 5 years +
- Experience operating or maintaining transport aircraft
- Meteorological knowledge & experience
- Experience in technical training, visual aids, training devices, flight simulators

Doc. 8335, Part I, Par. 6.2; Doc. 9760, Part II, Par. 3.1.3; Doc. 9734, Part A, Par. 3.5.1
New Inspector Qualification

Technical Knowledge

Education

Operational Experience

CAA Inspectors should compare favorably with the personnel they will inspect.

Doc 8335, Part I, Par. 6.2
Doc. 9760, Part II, Par. 3.1.3
Doc. 9734, Part A, Par. 3.5.1
ICAO: New Hire Operations Inspector

- Extensive experience as a pilot, instructor, or in operational management
- Airline Transport Pilot’s license
- 5,000+ hours as pilot-in-command
- Qualified on operator aircraft

Doc. 8335, Part I, Par. 6.2
The flight operations inspector applicant should hold or have held a pilot licence/rating at least equal to the licence/rating for which assessments are conducted and have relevant experience in the aircraft operations subject to oversight.

Knowledge of safety management systems is desirable, as is relevant experience in the provision of flight training and checking.
ICAO: New Hire Airworthiness Inspector

- Extensive academic & technical education
- Positions of increased technical and supervisory responsibility
- Aeronautical licenses, certificates or academic degrees commensurate with job responsibilities

Doc. 8335, Part I, Par. 6.2.5;
Doc. 9760, Part II, Par. 3.1.3
The airworthiness inspector applicant should generally hold an aircraft maintenance technician licence or a similar qualification in an approved maintenance organization.

Knowledge of quality and safety management systems is desirable, as is relevant experience in the provision of maintenance training and checking.

Doc. 10070, Part 2.2.2
ICAO: New Hire ANS Inspector

- The air navigation services inspector applicant should hold or have held an air traffic controller license (or equivalent qualification) and have relevant experience in the duties assigned by the CAA.

- Knowledge of safety management systems is desirable, as is relevant experience in the provision of air traffic services training and checking.

Doc. 10070, Part 2.2.4
ICAO: New Hire AGA Inspector

- Experience a broad exposure to aerodrome ground operations
- Engineer (civil or electrical) with adequate experience in aerodrome/heliport planning, operation or maintenance and should possess a sound knowledge of Annex 14-Aerodrome, Volume 1- Aerodrome Design and Operations and Volume II – Heliports, relevant ICAO manuals and national regulations and practices
- Aerodrome / Heliport management experience and knowledge of SMS
ICAO: New Hire AIG Investigator

- an understanding of the depth of investigation that is necessary in order for the investigation to conform with the legislation, regulations and other requirements of the State for which they are conducting the investigation
- a knowledge of aircraft accident investigation techniques
- an understanding of aircraft operations and the relevant technical areas of aviation
- the ability to obtain and manage the relevant technical assistance and resources required to support the investigation
- the ability to collect, document and preserve evidence
- the ability to identify and analyze pertinent evidence in order to determine the causes and, if appropriate, make safety recommendations; and the ability to write a final report that meets the requirements of the accident investigation authority of the State conducting the investigation
Inspector Pay

- Consistent with education & technical experience
- Comparable to industry personnel
- The CAA must be a competitive employer

ICAO Doc. 9734, Part A, Par. 3.4.2
Developmental Inspector

- A person hired to be an inspector but who does not meet all of the minimum recruitment standards specified by the CAA
- An inspector who has not yet completed minimum core training
- These persons will continue to develop their training and experience under the guidance of the CAA until they meet the minimum requirements for Principal Inspector
## Inspector Competency Framework

<table>
<thead>
<tr>
<th>ETHIC AND VALUES</th>
<th>Demonstrates integrity, transparency, openness, respect and fairness and considers the consequences when making a decision or taking action. Acts consistently in accordance with fundamental values of the civil aviation authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATION</td>
<td>Effectively conveys, receives and understands information in oral, written and non-verbal modes</td>
</tr>
<tr>
<td>PROBLEM SOLVING AND DECISION MAKING</td>
<td>Solves issues of varied levels of complexity, ambiguity and risk. Makes timely decisions that take into account relevant facts, tasks, goals, constraints, risks and conflicting points of view</td>
</tr>
<tr>
<td>INITIATIVE</td>
<td>Identifies and addresses issues independently, proactively and persistently to achieve objectives</td>
</tr>
<tr>
<td>TECHNICAL EXPERTISE</td>
<td>Applies and improves technical knowledge and skills to perform safety oversight duties in a specific aviation discipline</td>
</tr>
</tbody>
</table>
## Inspector Competency Framework

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SYSTEMS THINKING</strong></td>
<td>Understands and determines how the various components of management systems interact and affect the overall system safety performance</td>
</tr>
<tr>
<td><strong>RISK MANAGEMENT</strong></td>
<td>Demonstrates an effective approach to the oversight of a stakeholder considering its business model, risk profile and its availability of resources</td>
</tr>
<tr>
<td><strong>LEADERSHIP AND TEAMWORK</strong></td>
<td>Collaborates up, down and across the organization to foster and promote a clear vision and common goals. Energizes others to achieve the goals and positive results</td>
</tr>
<tr>
<td><strong>CRITICAL THINKING</strong></td>
<td>Analyses information in order to consistently achieve desired outcomes</td>
</tr>
</tbody>
</table>
Any Question?
Module 4
Module 5
Training Profiles
Training Profile

What is it?

Training Profiles show required training in a simple visual format
Required Training

Training Profiles show the mandatory training that is required for all Inspectors.

These training requirements are not optional!
Training Categories

- Indoctrination
- Certification
- Surveillance
- Personnel Licensing
- Investigation
- Job Skills
- Specialty Inspector
- Management

CORE TRAINING

OPTIONAL TRAINING
Indoctrination

- For all new employees
- Basic administrative skills
- Normal office procedures
Certification

Aviation Industry Organizations:
- Air Operators
- Aircraft Maintenance Organizations
- Design Organization Approval (DOA)
- Aerodrome (Airport, Heliport, Water Aerodrome)
- Air Navigation / ATS Provider
- Regulated Agent
- etc
Surveillance

- Inspection of Operators
- Approved Air Operator Training Program
Personnel Licensing

- Flight & Ground Personnel
- Normally Pilot, Flight Engineer, Aircraft Maintenance Engineer, FOO, ATC, CNS personnel, DG personnel, Aerodrome personnel.
- Includes Flight Training (for Pilot, FE, Cabin crew) or OJT (for ATC, FOO, CNS, etc)
- Aviation Training Organization (ATO)
Investigation

- Aircraft Accidents
- Serious Incident
- Incident
- Law Enforcement
- etc
Job Skills

Optional training:

- Advanced Techniques
- Safety Management Systems
- Foreign Air Carriers
- Aircraft Certification
- Major Repairs & Alterations
- Simulator Evaluation
- etc
Specialty Inspector

- Aircraft Dispatcher – OPS Profile
- Cabin Safety – OPS Profile
- Avionics – AIR Profile
- Fire-Fighting – AGA Profile
- AFIS – ATS Profile
- Data Processing – CNS Profile
- etc
Management

- Same as Indoctrination but with management responsibilities
Training Requirements

Category

- Formal Course 1
  - Job Tasks
    1. --
    2. --
    3. --

- Formal Course 2
  - Job Tasks
    1. --
    2. --
    3. --

- Formal Course 3
  - Job Tasks
    1. --
    2. --
    3. --
Training Required

Required training is based on the Job Tasks that an inspector will be asked to perform.

Required Training = Formal Training Course + OJT on Each Job Task
To Determine the Training Required

(Course Developer Unit is Needed)

1. Locate the Job Task to be assigned
2. Complete the Formal Course
3. Complete OJT on the Job Task
Final Qualification Inspector

Inspector must complete both:

1. Formal Training Course
2. On-the-Job Training

For each Job Task before given the authority to accomplish that Job Task without supervision.
Any Question?
Module 5
Module 6

Training Process
Training Analogy

<table>
<thead>
<tr>
<th>Airline New Hire</th>
<th>Indoc. License</th>
<th>Co-Pilot Continue Line training</th>
<th>Captain</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAA New Hire</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Airline New Hire</th>
<th>Indoc. Credential</th>
<th>Journeyman Continue core training</th>
<th>Principal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OJT Training

CAA New Hire Indoc. License Co-Pilot Continue Line training 5 YEARS

CAA New Hire Indoc. Credential Journeyman Continue core training

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Training Process

New Hire Inspector
-Meets Criteria? – Issue Developmental PD.

Formal Indoctrination Training Course
OJT on Indoctrination Job Tasks

Issue Inspector Credential

Formal AOC Certification Course
OJT on Associated Job Tasks

Formal Surveillance Training Course
OJT on Associated Job Tasks

Formal Personnel Licensing Course
OJT on Associated Job Tasks

Formal Investigations Course
OJT on Associated Job Tasks

Assignment as Journeyman Inspector
- Issue Position Description -

Optional Job Skills and Specialty Training Courses as Required.
OJT on Associated Job Tasks

Recurrent Training Program
What is Authority?

- Power to represent the government
- Conveyed by inspector credential
- Requires completion of Indoctrination Formal Course
What is Qualification?

- Certification of ability
- Achieved one Job Task at a time
- Requires completion of OJT and the associated Formal Course
- Conveyed by Office Mgr. sign-off in training record
What is Authorization?

- Official assignment to responsibility
- Conveyed by Position Description
- Requires completion of required training, such as Minimum Core courses for Principals
Example of Certification Training Category

Several Formal Course

- Air Operator Certification
- AMO Certification
- ATS unit Provider Certification
- AFIS Certification
- Aerodrome or Heliport Certification
- Regulated Agent Certification
- etc
Formal Course

- AMO Certification

Individual Job Task

- Approve Records
- Evaluate Facilities
Formal Course
- AMO Certification

Individual Job Task
- Approve Records

OJT
- Level 1, 2, 3
Training Process

Each Training Category

Formal Training Course

OJT on each Job Task assigned
### Training Category

<table>
<thead>
<tr>
<th>3.0 Surveillance</th>
<th>3.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Course Name: Air Operator Surveillance - Operations</td>
<td>Formal Course Number: 3001</td>
</tr>
</tbody>
</table>

### Formal Course

- Plan a Surveillance Work Program
- Conduct an Ultralight Ramp Inspection
- Conduct Airplane Ramp Inspection
- Conduct a Cabin En Route Inspection
- Conduct a Cockpit En Route Inspection

### Job Tasks

<table>
<thead>
<tr>
<th>Surveillance</th>
<th>Air Operator</th>
<th>3.001</th>
<th>Plan a Surveillance Work Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveillance</td>
<td>Air Operator</td>
<td>3.002</td>
<td>Conduct an Ultralight Ramp Inspection</td>
</tr>
<tr>
<td>Surveillance</td>
<td>Air Operator</td>
<td>3.003</td>
<td>Conduct Airplane Ramp Inspection</td>
</tr>
<tr>
<td>Surveillance</td>
<td>Air Operator</td>
<td>3.004</td>
<td>Conduct a Cabin En Route Inspection</td>
</tr>
<tr>
<td>Surveillance</td>
<td>Air Operator</td>
<td>3.005</td>
<td>Conduct a Cockpit En Route Inspection</td>
</tr>
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Final Qualification Inspector

كرة Inspector must **complete both**:

1. Formal Training Course
2. On-the-Job Training

كرة For each Job Task before given the authority to accomplish that Job Task **without supervision**.
Module 7

Formal Course Standards
What is Formal Course?

- Normally taught in a classroom.
- Presented by trained expert instructor.
- Includes interaction with other students.
- Includes courseware:
  - Approved Curriculum
  - Book
  - Presentations
  - Exercises, Exams, etc
What Content Should these Courses Contain?

- What subjects?
- How many hours?
- Prerequisites?
- What is required by ICAO?
Formal Course Standards (FCS)

- Describes the minimum course content that is required for all formal courses.
- Organized according to the Training Categories
<table>
<thead>
<tr>
<th>Course Number</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Title</td>
<td>Air Operator Certification - Operations</td>
</tr>
<tr>
<td>Training Profile</td>
<td>Operations</td>
</tr>
<tr>
<td>Training Category</td>
<td>Certification 2.0</td>
</tr>
<tr>
<td>Sequence</td>
<td>Initial</td>
</tr>
<tr>
<td>Course Length</td>
<td>80 Hours</td>
</tr>
<tr>
<td>Course Objective</td>
<td>Objective</td>
</tr>
<tr>
<td>Course Description</td>
<td>Narrative Description</td>
</tr>
<tr>
<td>Course Content</td>
<td>Required Subjects</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>None</td>
</tr>
<tr>
<td>Revision Date</td>
<td>June 1, 2019</td>
</tr>
<tr>
<td>Course Manager</td>
<td>Flight Standards Training Manager</td>
</tr>
<tr>
<td>Associated CAA training Courses</td>
<td>CAA course numbers for website reference</td>
</tr>
</tbody>
</table>

**FCS Format**

The FCS describes and specifies minimum content for classroom training courses.
Ways to use the FCS

❖ Find the minimum standards for formal courses that are acceptable in ICAO and ICBF
❖ Compare an existing course to see if it should be provided to your CAA inspectors
❖ Specify minimum content for a course you are planning to develop in your department
Meeting the Standard!

- All formal classroom training courses provided to CAA Inspectors must meet the minimum requirements specified in the Formal Course Standards in order to be used for credit in the ICBF.
What Should You Do With a Deficient Course?

- Choose another course
- Modify the course with additional time and content so that it complies with ICBF
- Complete the deficient course and then take a second supplementary course

“ICBF requires high quality courses that meet the minimum standards specified in the FCS”
Any Question?

Module 7
Module 8
Job Task Analysis
What is a Job Task?

A single identifiable unit of work that is regularly accomplished by CAA Inspectors
What is a Job Task Analysis?

- A written description of the materials, procedures, and requirements that are used to accomplish a Job Task, including:
  - Supporting documents.
  - Completion standards.
  - Narrative description of the task.
  - Step by step listing of required sub-tasks.

A separate Job Task Analysis has been prepared for each inspector Job Task.
### Job Task #:
OPS 3.003

### Title:
Conduct Airplane Ramp Inspection

### Approval Date:
August 1, 2019

### Comments:
Operator Specific

### Inspector Type:
Operations

### Training Category:
Surveillance

### Frequency:
Scheduled

### Associated CAA Job Tasks #:
2.001

### Regulation References:

### CAA Forms:

### Guidance Material References:
ICAO Doc., Civil Aviation Safety Regulation, staff instruction, etc

### Task Description:
To determine that an Air Operator aircraft is in compliance with the CARs during an actual operation.

### Job Performance Subtasks:
- Sub-Task 1
- Sub-Task 2
- Sub-Task 3

---

**J.T.A. Document**

Each JTA provides:
- Requirements
- References
- Description
- Step-by-step subtasks
<table>
<thead>
<tr>
<th>Job Task #:</th>
<th>OPS 3.003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
<td>Conduct Airplane Ramp Inspection</td>
</tr>
<tr>
<td>Approval Date:</td>
<td>August 1, 2019</td>
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<tr>
<td>Comments:</td>
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<tr>
<td>Frequency:</td>
<td>Scheduled</td>
</tr>
<tr>
<td>Associated CAA Job Tasks #:</td>
<td>2.001</td>
</tr>
<tr>
<td>Regulation References:</td>
<td></td>
</tr>
<tr>
<td>CAA Forms:</td>
<td></td>
</tr>
<tr>
<td>Guidance Material References:</td>
<td>ICAO Doc., Civil Aviation Safety Regulation, staff instruction, etc</td>
</tr>
<tr>
<td>Task Description:</td>
<td>To determine that an Air Operator aircraft is in compliance with the CARs during an actual operation.</td>
</tr>
<tr>
<td>Job Performance Subtasks:</td>
<td>Sub-Task 1, Sub-Task 2, Sub-Task 3</td>
</tr>
</tbody>
</table>

### J.T.A. Document
- JTA Number
- Identifiable unit of work
- Date of JTA issue
- May require knowledge of specific company procedures
- Inspector type
- Training category
- Schedule
- Document reference
- Narrative task description
- Steps to accomplish the task
JTAs Tell Us:

Trainee: How to perform the job

Instructor: The steps and requirements to teach when conducting training on the task
JTA Organization

- Job Tasks are listed in the Inspectors Training Profiles
- Divided into the Training Categories
- All possible Job Tasks are listed
- OJT is required only for those Job Tasks that an inspector will be assigned to perform
Any Question?
Module 8
Module 9
On-the Job Training Process
Structured OJT Process

Unstructured OJT
- haphazard
- unplanned
- Inconsistent
- less effective
- “Go-sit-with-Joe” training

Structured OJT
- Timely according to need
- Consistent
- Proven more effective
- Higher retention
- Measured results
OJT & Classroom Training

**Similarities**
- Scheduled training
- Planned lessons
- Evaluate learning with a test

**Difference**
- OJT is flexible
- Less formal
- Tailored to the needs of an individual
- Used to assure final inspector qualification
OJT Process

- OJT System Implementation
  - Phase 1 – Planning
  - Phase 2 – Delivery
  - Phase 3 – Evaluation

- OJT Instructor Process
  - Level 1 – Knowledge
  - Level 2 – Understand
  - Level 3 – Perform
OJT System: Phase I - Planning

1. Select the OJT Program Manager
2. Review the OJT needs of the local office
3. Select OJT Instructors
OJT System: Phase I - Planning

1. Meeting of key participants.
2. Provide all ICBF documents.
3. Describe the program.
4. Build “Positive Safety Culture” through communication, training, sharing.
OJT System: Phase I - Planning

Meet with Each Trainee:
- Review the OJT process
- Agree on Job Tasks
- Assess previous experience
- Agree on formal training
- Provide resources
- Set up the Training Record for the trainee
OJT System: Phase II - Delivery

1. Schedule work time to accomplish OJT
2. Consider Training Level and task complexity
3. Level I = self study + discussion
4. Levels II & III = actual task performance
5. Planning: Normal time + 50%
6. Example: 1.0 hr task $\rightarrow$ 1.5 hrs for OJT
OJT System: Phase II - Delivery

1. Review Job Task Analysis
2. Gather needed equipment
3. Arrange for assistance if needed
4. Create a lesson plan if needed
5. Finalize logistics
OJT System: Phase II - Delivery

Level | Trainee | Instructor
--- | --- | ---
I Knowledge | Study | Discuss
II Understand | Observe | Demonstrate
III Perform | Perform | Evaluate
Review results with Manager

Training Successful?

Plan Next Training Level

Yes

No

Repeat Training
OJT System: Phase II - Delivery

1. Update ITS Training Record.
2. Done by OJT PM with manager’s approval.
3. Data entry:
   - Find Job Task
   - Find level of training
   - Enter date completed
OJT System:
Phase II - Delivery

1. Individual OJT Review
2. Quarterly [or as needed]
3. Review:
   - Progress & status
   - Accuracy
   - Problems
   - Modify OJT plan as needed
   - Identify next tasks & opportunities
OJT System: Phase III - Evaluation

1. Conduct annual system evaluation
2. Local & national
3. Use documents (OJT Evaluation Question for Trainee)
4. Use documents (OJT Evaluation Question for OJT Instructor, OJT Program Manager and Training Manager (Office Manager))
### OJT Evaluation Questions – Trainee

1. What do you like best about the OJT Program?

2. What do you think could be improved in the OJT Program?

3. Is the OJT Guide being followed? Yes □ No □ Don’t know □
   What part(s) are not being followed and why?

4. What is the most time-consuming aspect of OJT for you and why?
   Is it well spent? Yes □ No □ Don’t know □

5. Did you have an opportunity to give open feedback to your supervisor about your OJT? Yes □ No □

6. Did you have a clear understanding of the objectives for your OJT tasks? Yes □ No □

7. Was your learning environment free from distractions? Yes □ No □

8. Did your instructor provide the necessary assistance to help you achieve the objectives? Yes □ No □

9. Do you feel confident that you met the objectives during you OJT? Yes □ No □

10. Have you received sufficient support from your Office Manager during OJT? Yes □ No □

### OJT Evaluation Questions – OJT Instructor, OJT PM, Office Manager

1. What do you like best about the OJT Program?

2. What do you think could be improved in the OJT Program?

3. Is the OJT Guide being followed? Yes □ No □ Don’t know □
   What part(s) are not being followed and why?

4. What is the most time-consuming aspect of OJT for you and why?
   Is it well spent? Yes □ No □ Don’t know □

5. Do you find yourself needing to use the expertise of other personnel to deliver OJT? Yes □ No □
   How, and for what subjects?

6. What kind of planning activities do you do to prepare to deliver an OJT session?

7. Does your office have a sufficient number of instructors? Yes □ No □
   Why, or why not?
1. Communicate evaluation results
2. Share feedback, problems, suggestions
3. Revise documents
4. OJT PMs communicate:
   - to management
   - to local offices
OJT System: Phase III - Evaluation

1. Identify problems
2. Make improvements
3. Distribute revised documents

= Continuous System Improvement
OJT Instructor Process

- Level 1 – Knowledge
- Level 2 – Understand
- Level 3 – Perform
Which of these training levels is basically observing the trainee perform the task?

a) Level I
b) Level II
c) Level III
Who authorizes you to conduct OJT once you have completed OJT instructor training?

a) Training Manager  
b) Supervisor  
c) OJT Program Manager
Level I Purpose

Knowledge

Trainee: Study

Instructor: Discuss
Conducting Level I

First Meeting:
- Provide JTA and guidance materials
- Assign independent study

Second Meeting:
- Put trainee at ease
- Discuss performance objectives
- Discuss JTA and guidance materials
- Conduct validation
Level I Objectives

1. Identify guidance materials and tools for the task
2. Define key terms
3. Explain how the task is initiated
4. Explain the task outcomes
5. Describe how task is closed
Level I Validation

1. Identify guidance materials and tools for the task
2. Define key terms
3. Explain how the task is initiated
4. Explain the task outcomes
5. Describe how task is closed

Use the “show me” concept!

Can the trainee do these things? Yes / No

[Checkmark]
Level II Purpose

Understand

Trainee:
- Observe
- Assist

Instructor:
- Demonstrate
- Explain
Conducting Level II

- Review Level I
- Gather required materials
- Discuss performance objectives
- Demonstrate task & explain
- Trainee observes / assists if able
- Ask trainee for next steps
- Ask how each step is performed
Ask Interactive Questions

- Require more than a one-word answer
- Require attention & application
- Questions that use:
  - What, which, when where, why, how
- Use the “show me” concept

• What would you do next?
• Do you understand?
• Am I doing this step correctly?
Level II Objectives

1. Describe sequence of steps to accomplish task
2. Describe how materials, forms, equipment are used
3. Describe interactions with other personnel
4. Describe coordination with operator
Level II Validation

1. Describe sequence of steps to accomplish task
2. Describe how materials, forms, equipment are used
3. Describe interactions with other personnel
4. Describe coordination with operator

Can the trainee do these things? Yes / No
Level III Purpose

Evaluation

Trainee:
Perform

Instructor:
Evaluate
Conducting Level III

- Review Level II
- Explain expectations
- Observe trainee
  - Use JTA to check his steps
  - Circle omitted or incorrect steps for debriefing
- Assist only if required
- Stop for unsafe or illegal actions
- May need more than one session
Level III Consideration

- Is the task a simulation or the real thing?

- Did the trainee prepare adequately?
Give Effective Feedback

- Be Specific
- Objective
- Non-judgmental
- Corrective
- Balanced
- Timely
- Private
Level III Objectives

1. Demonstrate sufficient knowledge to accurately complete the task
2. Complete all steps necessary to complete the task
3. Complete steps in proper order
4. Perform task in timely manner and without assistance
5. Demonstrate proper judgment concerning the outcome of a task, and close it out in the correct manner
Level III Validation

1. Demonstrate sufficient knowledge to accurately complete the task
2. Complete all steps necessary to complete the task
3. Complete steps in proper order
4. Perform task in timely manner and without assistance
5. Demonstrate proper judgment concerning the outcome of a task, and close it out in the correct manner

Can the trainee do these things? Yes / No
Any Question?
Module 9
Module 10
Training Record
ICAO requires a permanent training record.
## Operations Inspector Training Profile Worksheet

**Inspector Name:**

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<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Planned Date</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
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**Formal Course Name:** New Employee Orientation  
**Formal Course Number:** 1001

**Date Completed:**
**Employee Data**

- **Employee Name:** Double Dawg Dare
- **Position Number:** 1144
- **Position Description:** AIR — Principal Avionics Inspector
- **Office ID:** GL12
- **Office Manager:** CGM
- **Supervisor:** CGM

---

### Employee Training and Development - AIR

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Formal Course
## Job Task List

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OJT for each Job Task
Hyperlinks to the Job Task Analysis documents.
## Management Reports

### Formal Course Training Report

**Page 1 of 2**

**Date: 06-Mar-09**

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<tr>
<th>Course Name</th>
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Training Record Software

_runs on Application or Training Record Software._
_runs includes both formal courses & OJT._
_runs Automated reports for managers._
_runs Provides 3 secure access levels._
Any Question?
Module 10
Module 11

Next Steps
Next Steps

1. Conduct internal audit of inspector training implementation at your CAA.

2. Create a plan to improve deficient areas.

3. Begin transition to ICBF.
Audit Review

1) Are there any areas of inspector staffing and training that should be improved in order to comply with the ICAO SARPS?
   - Adequate personnel?
   - Pay?
   - Equipment?
   - Formal Training Courses?
   - OJT?
   - Record keeping?
2) If your State implements the ICBF, will it make CAA fully ICAO compliant for inspector training?

- What else is required?
3) What are the next steps that you might take to implement the ICBF at CAA?

- Political Will?
- Funding?
- Technical Assistance?
Implementing

1) Have Director General formally adopt the ICBF in writing.
2) Install the ICBF Training Record software.
3) Review existing training records.
4) Determine the prior training & qualification already completed for each inspector.
One-Time Grandfather Rights

Formal Course

We recommend that you show an existing inspector qualified for a Formal Course if:

– Has **2 years experience as an inspector**, and;
– Has **completed a similar course that is at least 50% of the hours** required by ICBF.

If not: provide the training required by the ICBF system.
One-Time Grandfather Rights

Job Tasks

We recommend that you show an existing inspector qualified for a given Job Task if:

- Has 2 years experience as an inspector, and;
- Has accomplished the job task at least 2 times.

If not: provide the training required by the ICBF system.
Course Objectives

- Provides guidance for States to develop a training programme in compliance with ICAO requirements;
- Provide States with the guidance to improve CE-4 effective implementation scoring by increasing the number of qualified inspectors;
- Improving the safety oversight function.
THANK YOU!