



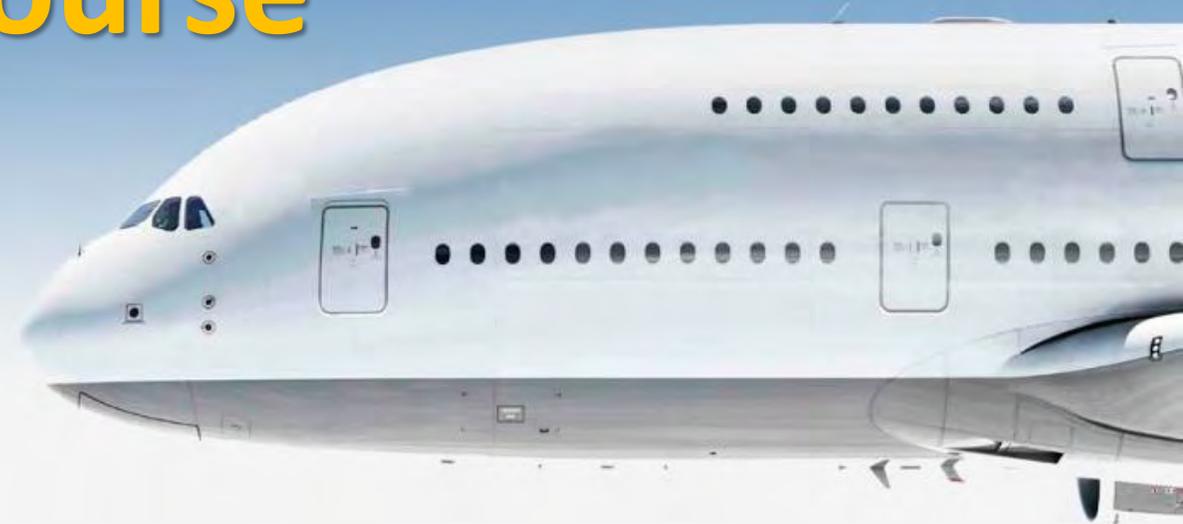
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Inspector Competency Building Framework (ICBF) course

Marcus Totok HERMAWAN
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



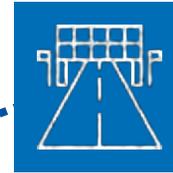
Module 3, 4, 5, 6, 7

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





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Module 1

International Obligation



ICAO

Inspector Competency Building Framework



ICAO Chicago Convention



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



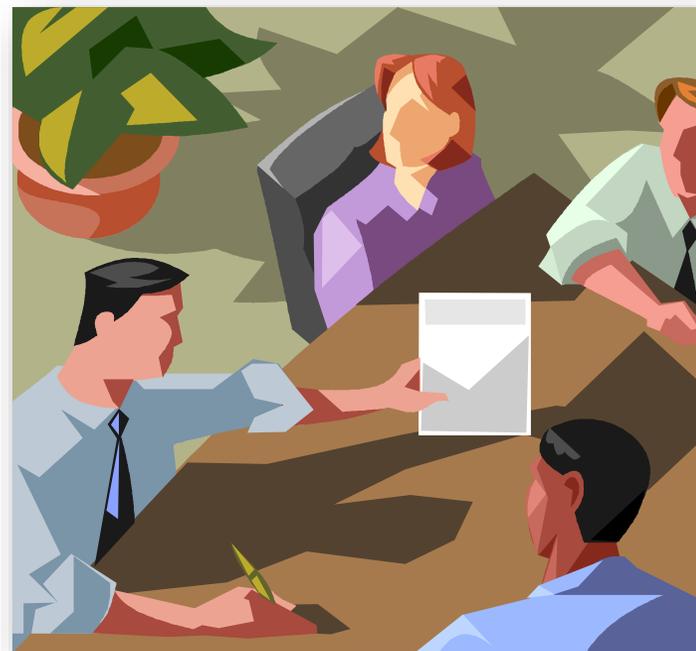
ICAO: Inspector Staffing

- ✈ 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

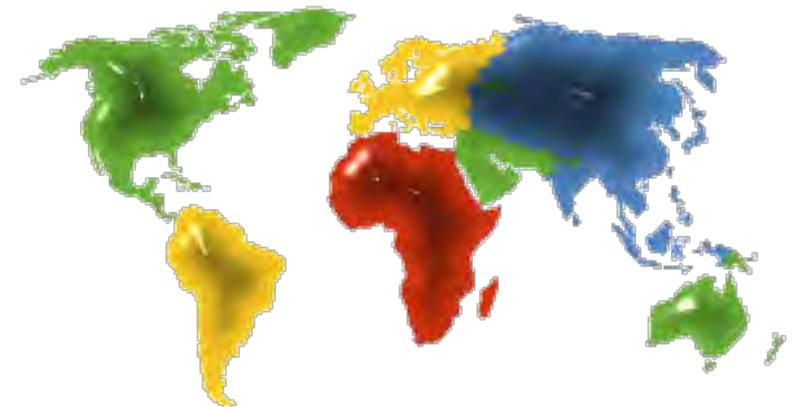




ICAO: Inspector Staffing

“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

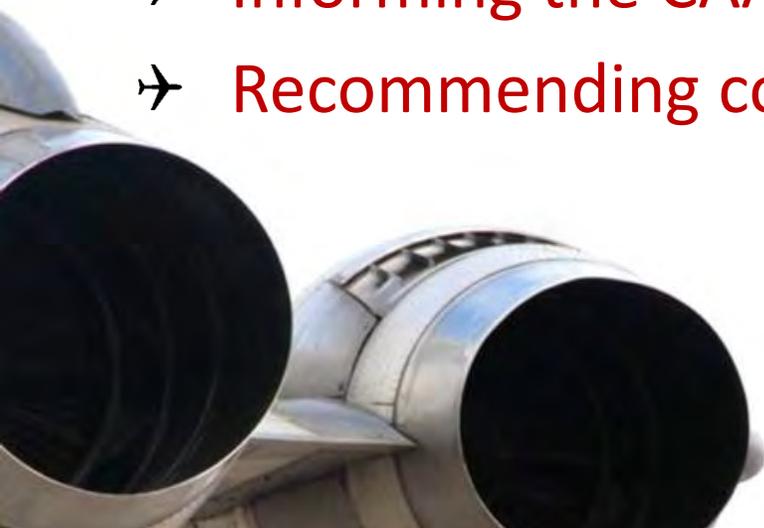




ICAO: Inspector Duties

- ✈ 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



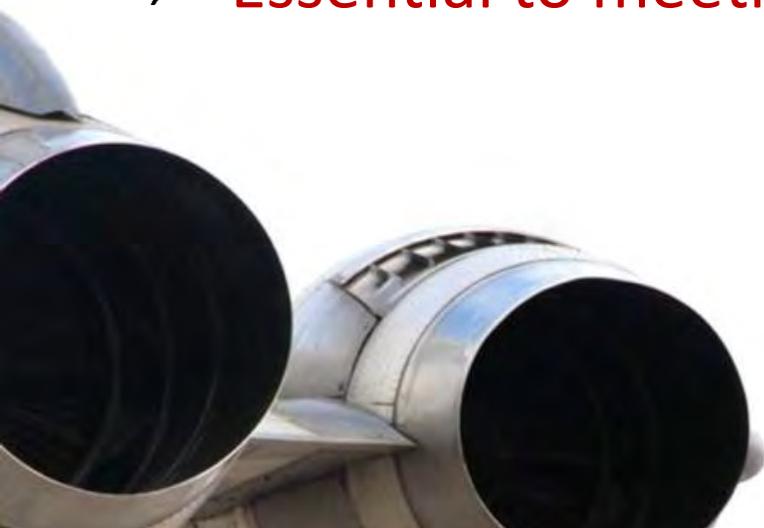


ICAO: Inspector Responsibilities

- ✈ 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



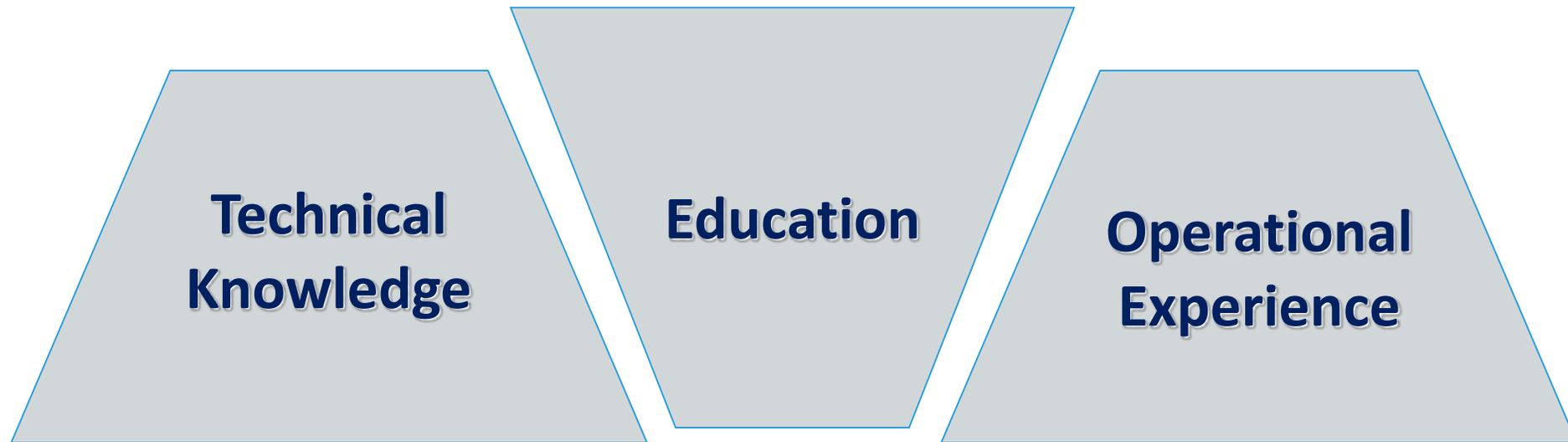


ICAO: Inspector Quality

“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.



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

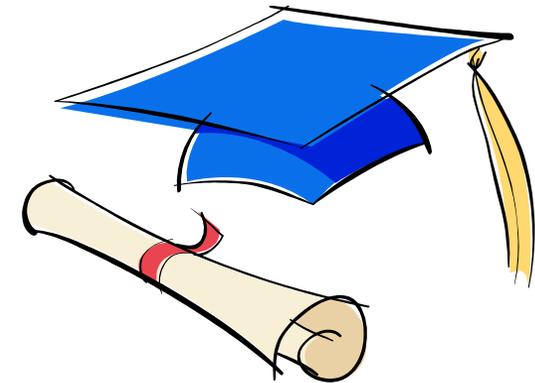




ICAO: Required Training

✈ 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





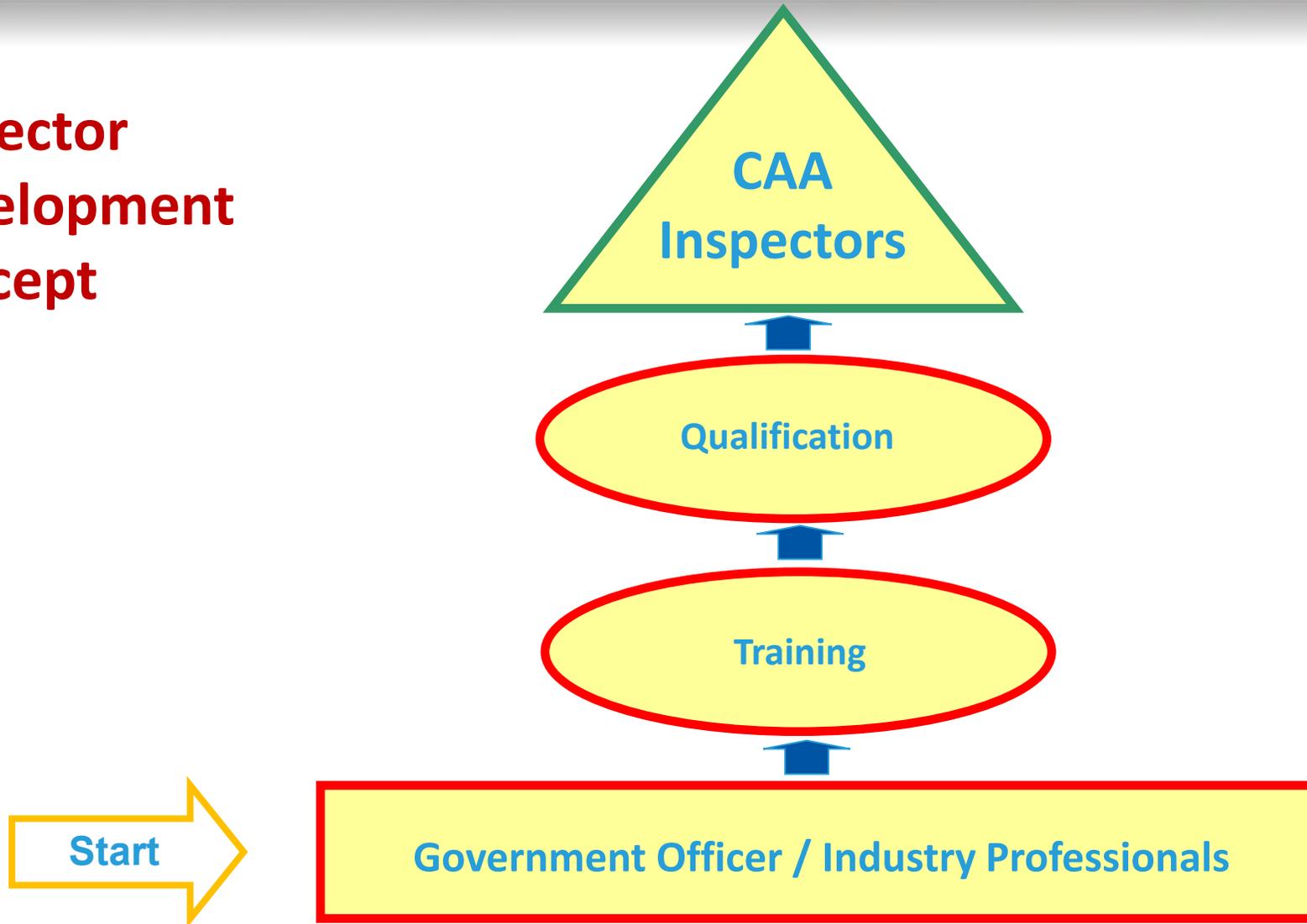
“The result of such training is better job performance and greater respect from those who are inspected and supervised by the CAA”

ICAO Doc. 9734, Part A, Par. 3.5.2





Inspector Development Concept





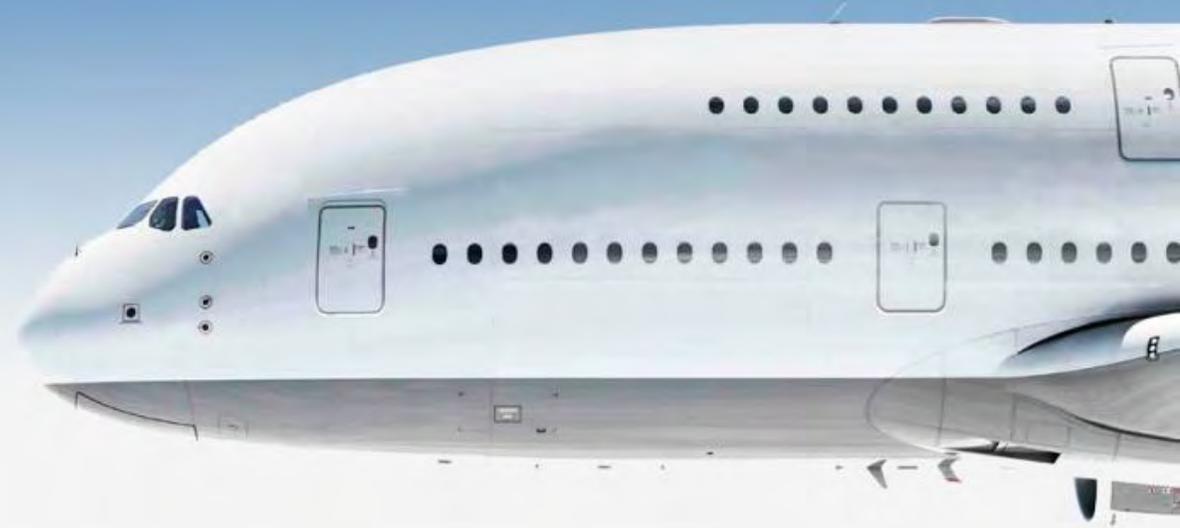
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Any Question ?

Module 1





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Module 2

ICBF Overview



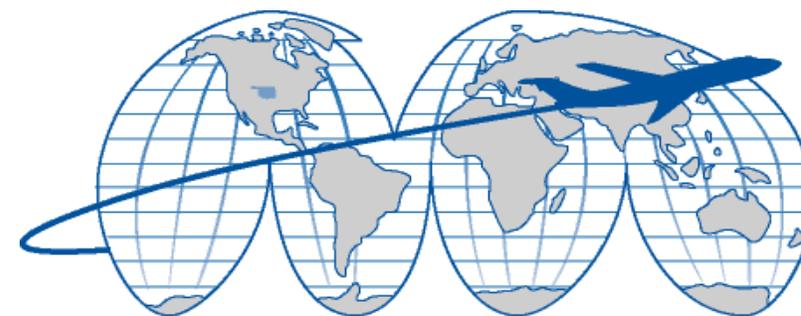
ICAO

Inspector Competency Building Framework



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.



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Any Question ?

Module 2





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Module 3

Training Policy



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Inspector Competency Building Framework



What is Policy ?

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





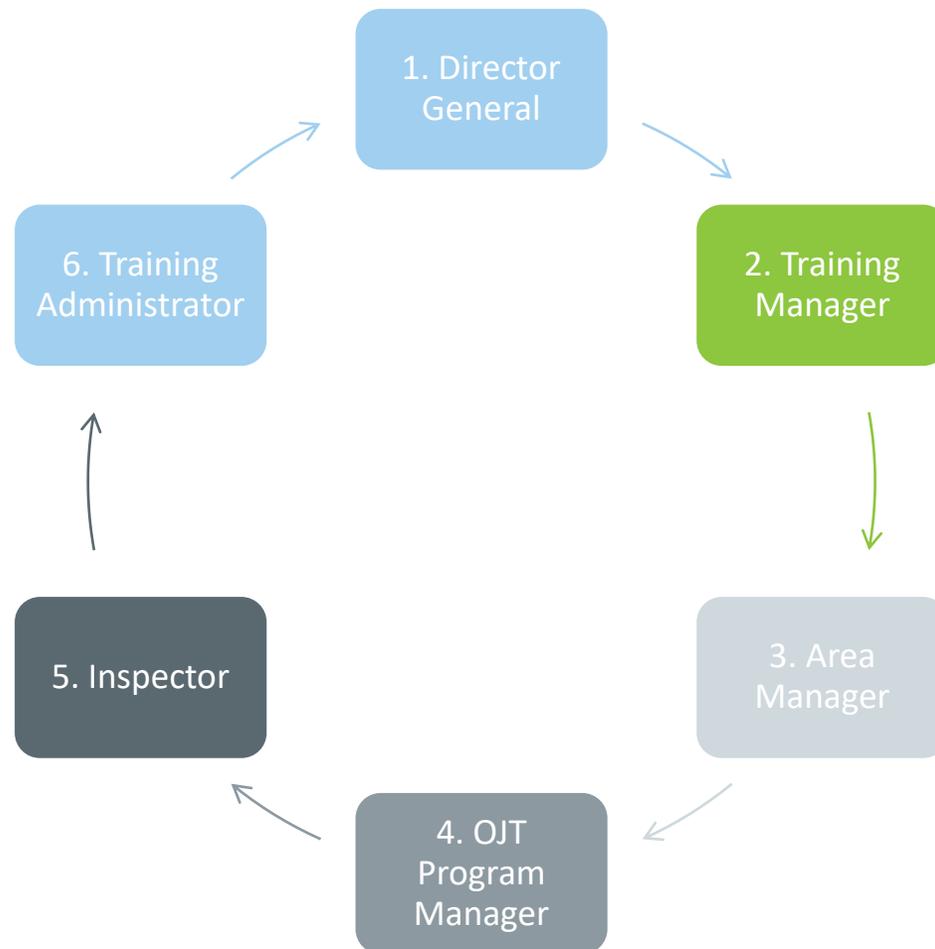
Training Policy

- ✈ 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





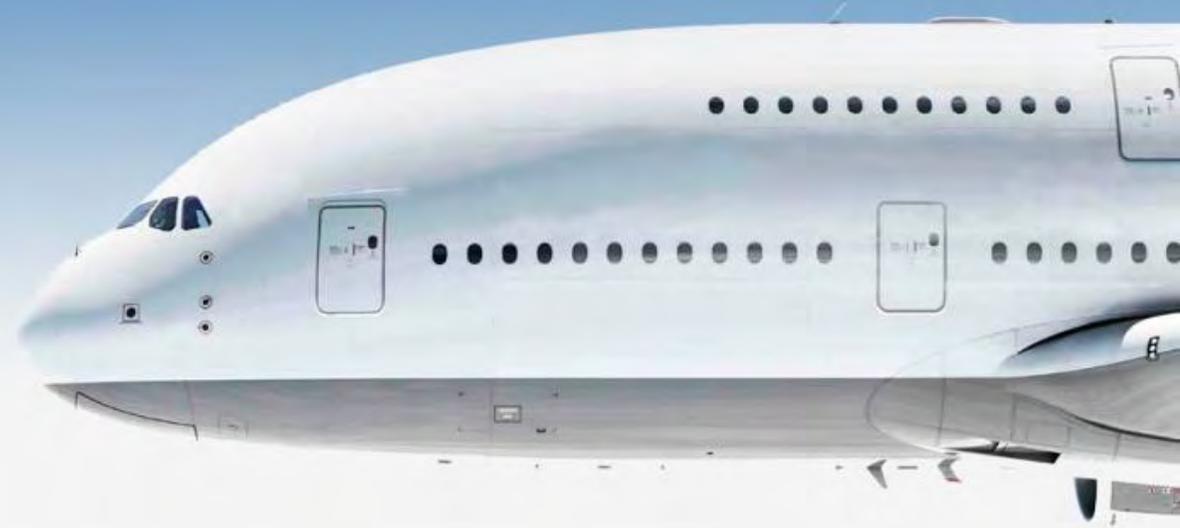
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Any Question ?

Module 3





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Module 4

New Hires Inspector



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Inspector Competency Building Framework



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

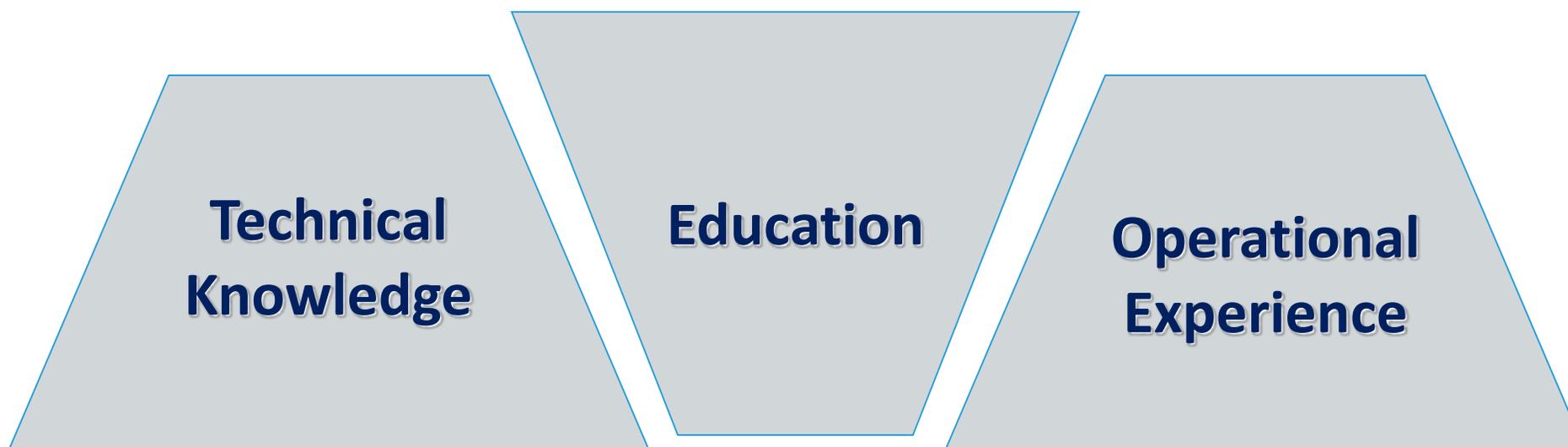
- ✈ Broad air transport background: 5 years +
- ✈ Experience operating or maintaining transport aircraft
- ✈ Meteorological knowledge & experience
- ✈ Experience in technical training, visual aids, training devices, flight simulators

*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



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

Doc. 10070, Part 2.2.3





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

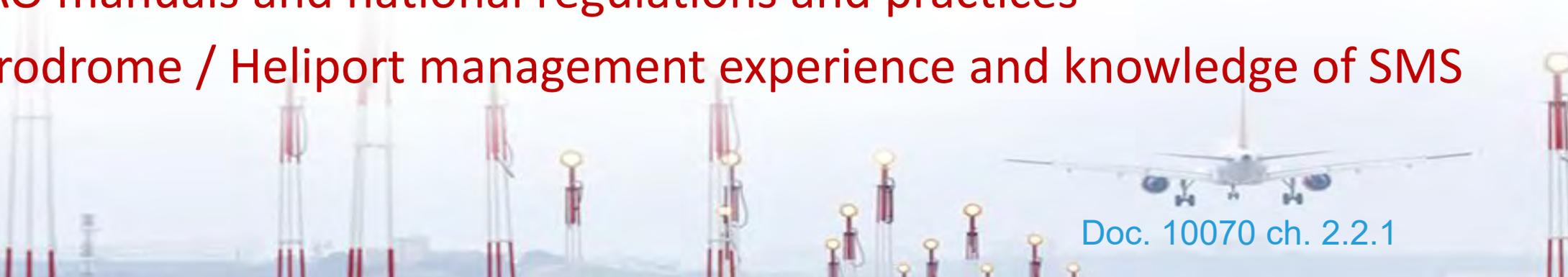
Doc. 10070, Part 2.2.4





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



Doc. 10070 ch. 2.2.1



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

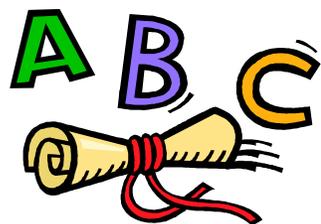
ICAO Doc. 9734, Part A, Par. 3.4.2





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

ETHIC AND VALUES	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
COMMUNICATION	Effectively conveys, receives and understands information in oral, written and non-verbal modes
PROBLEM SOLVING AND DECISION MAKING	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
INITIATIVE	Identifies and addresses issues independently, proactively and persistently to achieve objectives
TECHNICAL EXPERTISE	Applies and improves technical knowledge and skills to perform safety oversight duties in a specific aviation discipline



Inspector Competency Framework

SYSTEMS THINKING	Understands and determines how the various components of management systems interact and affect the overall system safety performance
RISK MANAGEMENT	Demonstrates an effective approach to the oversight of a stakeholder considering its business model, risk profile and its availability of resources
LEADERSHIP AND TEAMWORK	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
CRITICAL THINKING	Analyses information in order to consistently achieve desired outcomes



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Any Question ?

Module 4





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Module 5

Training Profiles



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Inspector Competency Building Framework



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

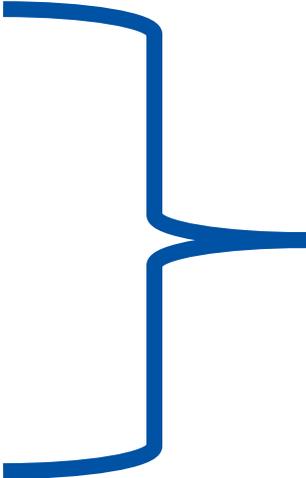


These training requirements are not optional !



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

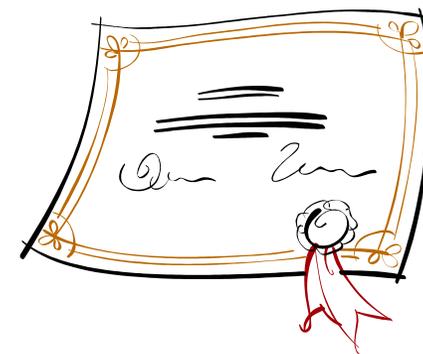




Certification

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





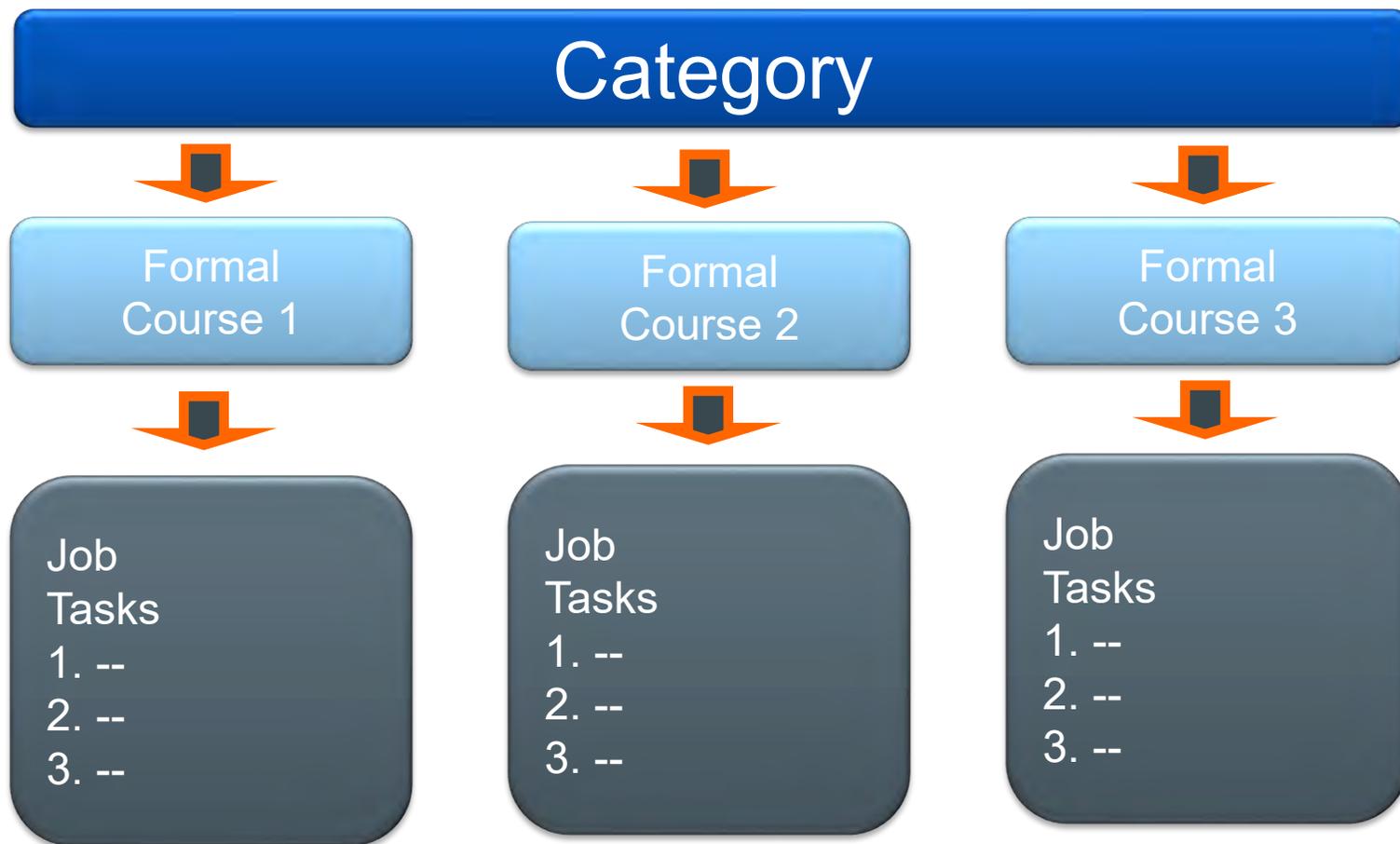
Management

- ✈ Same as Indoctrination but with management responsibilities





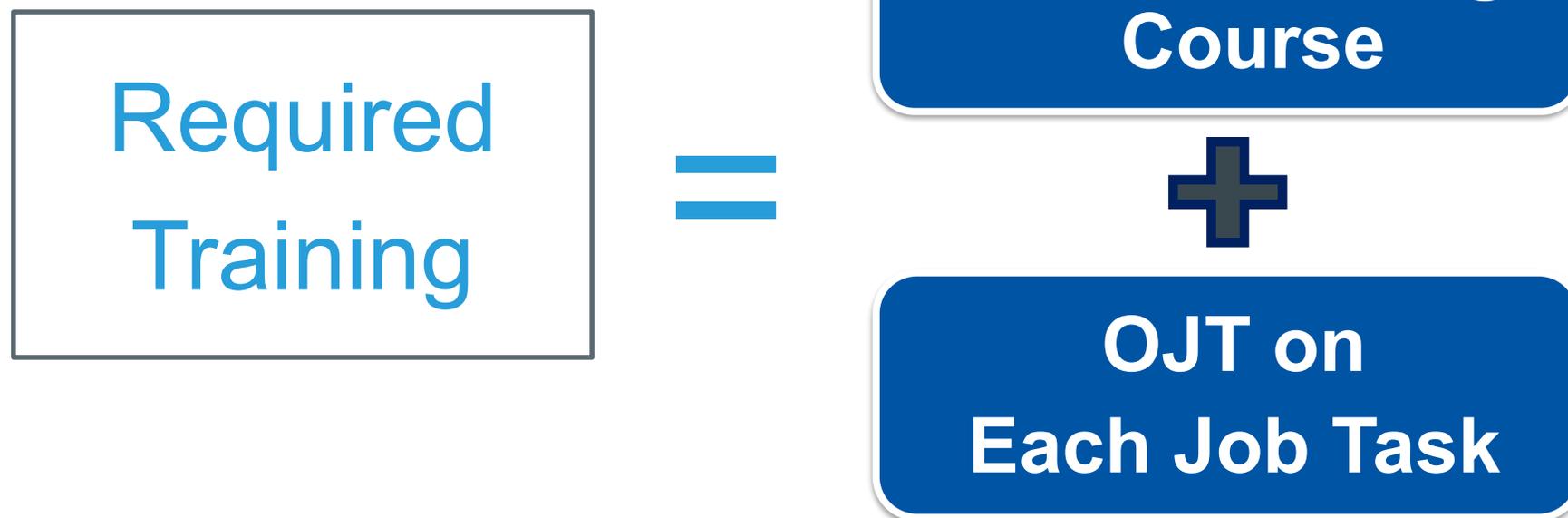
Training Requirements





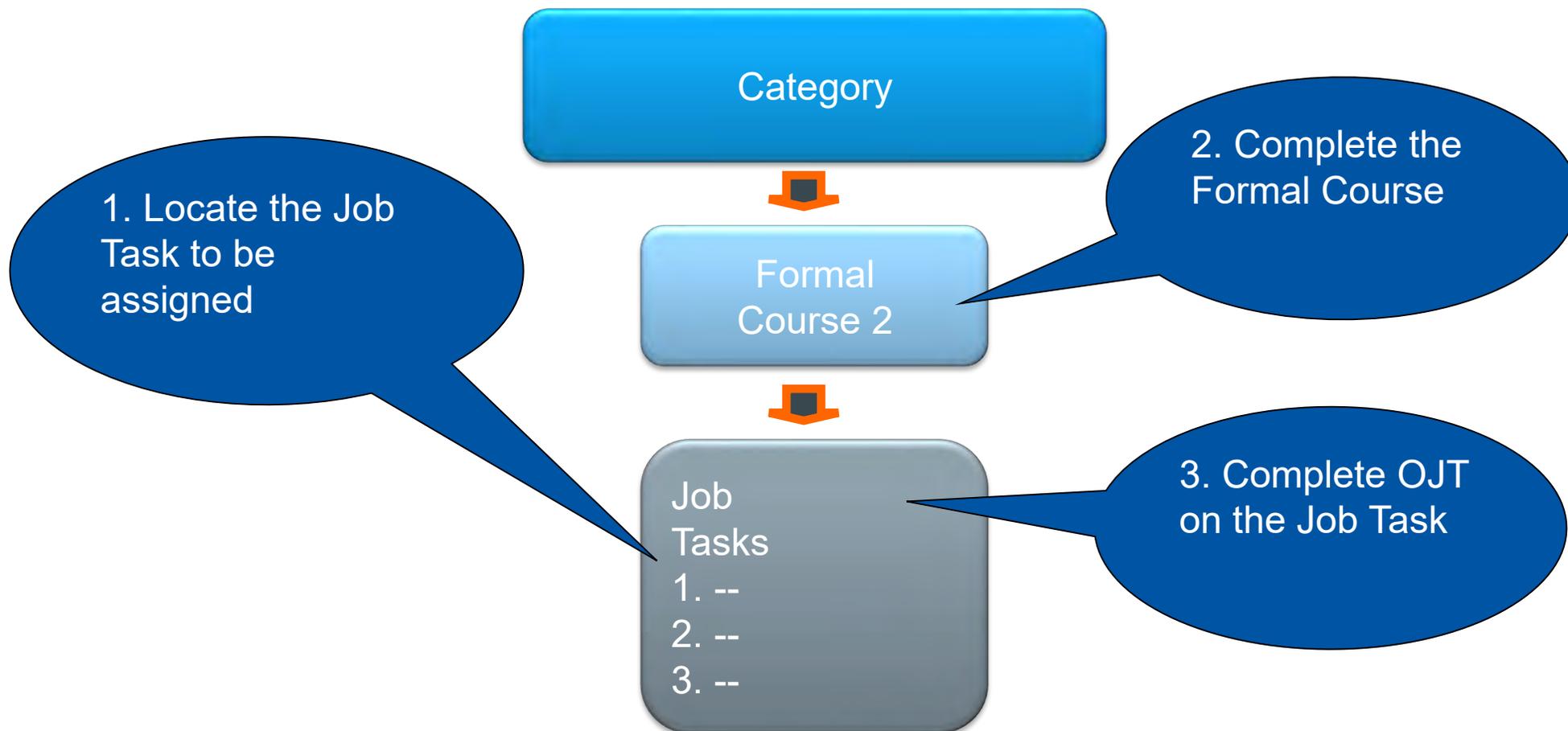
Training Required

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





To Determine the Training Required (Course Developer Unit is Needed)





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.**



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Any Question ?

Module 5





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Module 6

Training Process

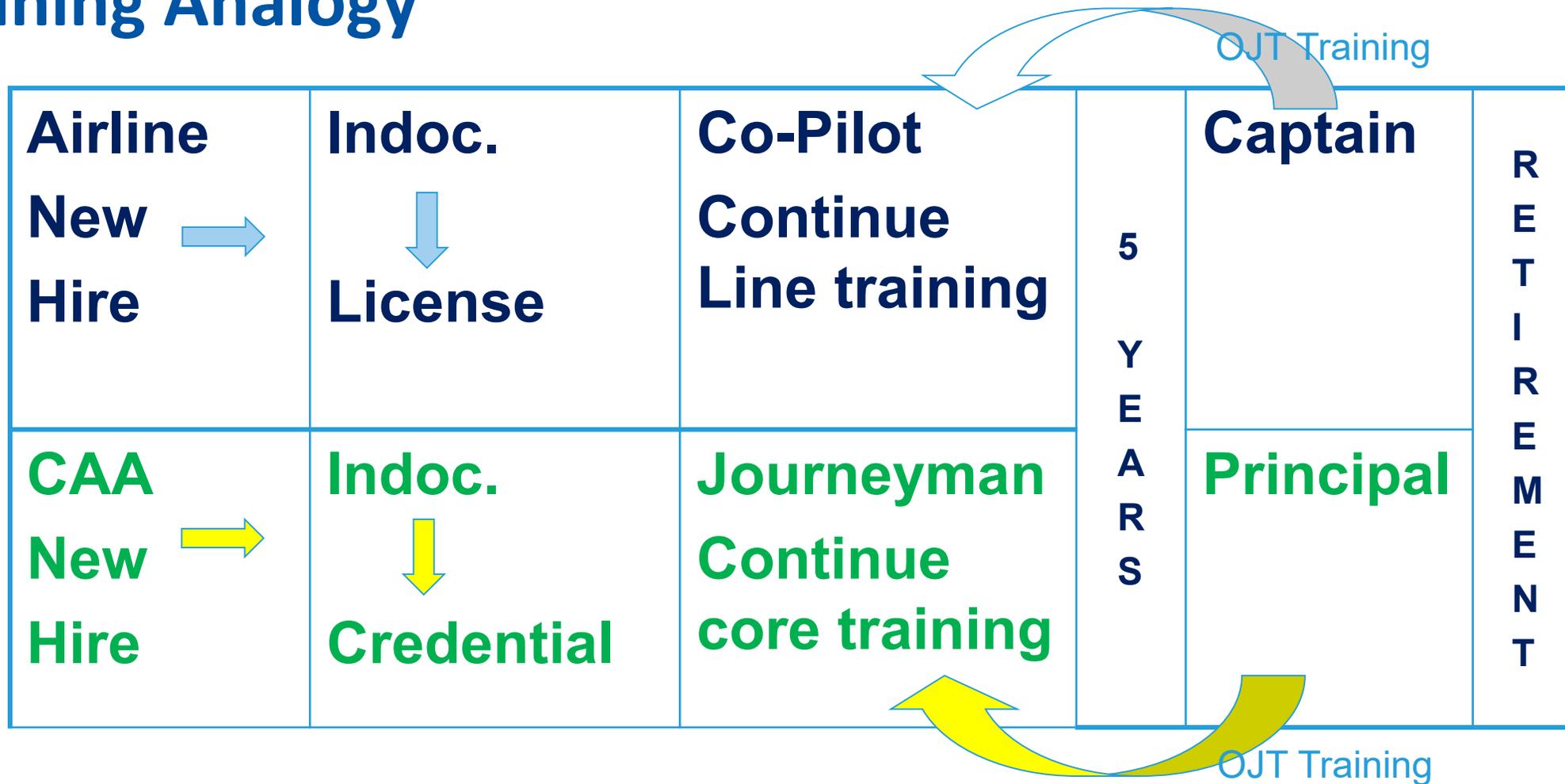


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Inspector Competency Building Framework



Training Analogy





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

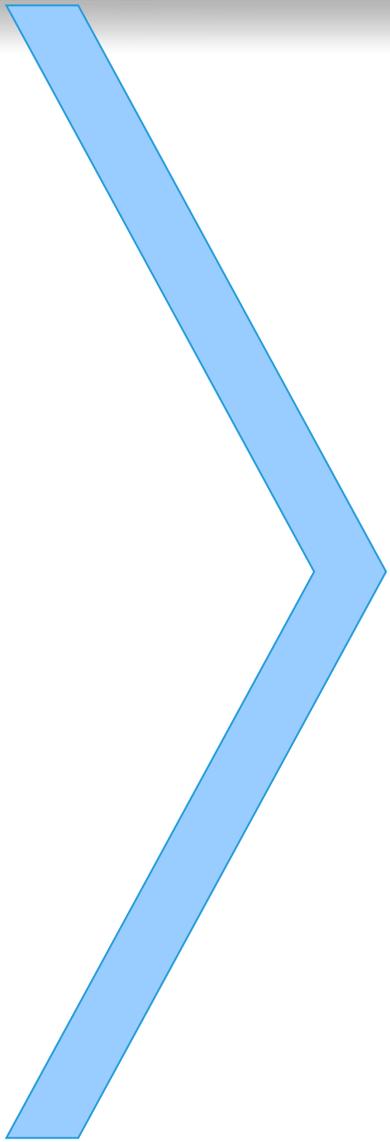
Formal Personnel Licensing Course
OJT on Associated Job Tasks

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



Training Process



What is Authority ?

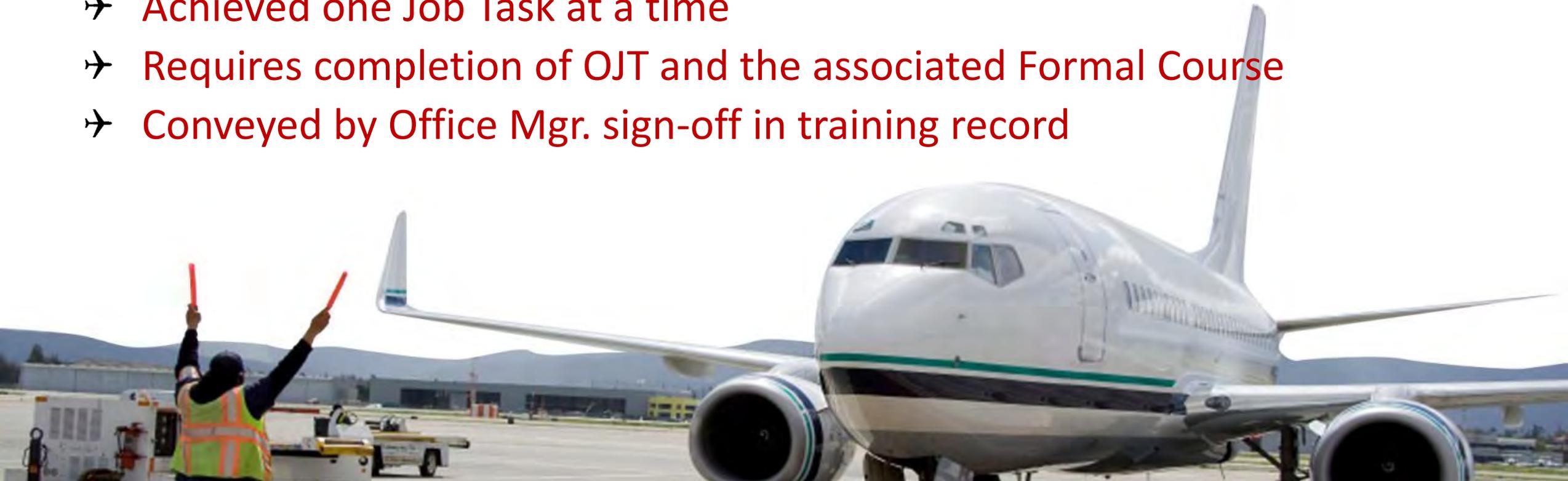
- ✈ Power to represent the government
- ✈ Conveyed by inspector credential
- ✈ Requires completion of Indoctrination Formal Course





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

Formal Course

3.0 Surveillance **3.000**
Formal Course Name: Air Operator Surveillance - Operations
Formal Course Number: 3001

Job Tasks

OJT

Surveillance	Air Operator	3.001	Plan a Surveillance Work Program
Surveillance	Air Operator	3.002	Conduct an Ultralight Ramp Inspection
Surveillance	Air Operator	3.003	Conduct Airplane Ramp Inspection
Surveillance	Air Operator	3.004	Conduct a Cabin En Route Inspection
Surveillance	Air Operator	3.005	Conduct a Cockpit En Route Inspection



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.**





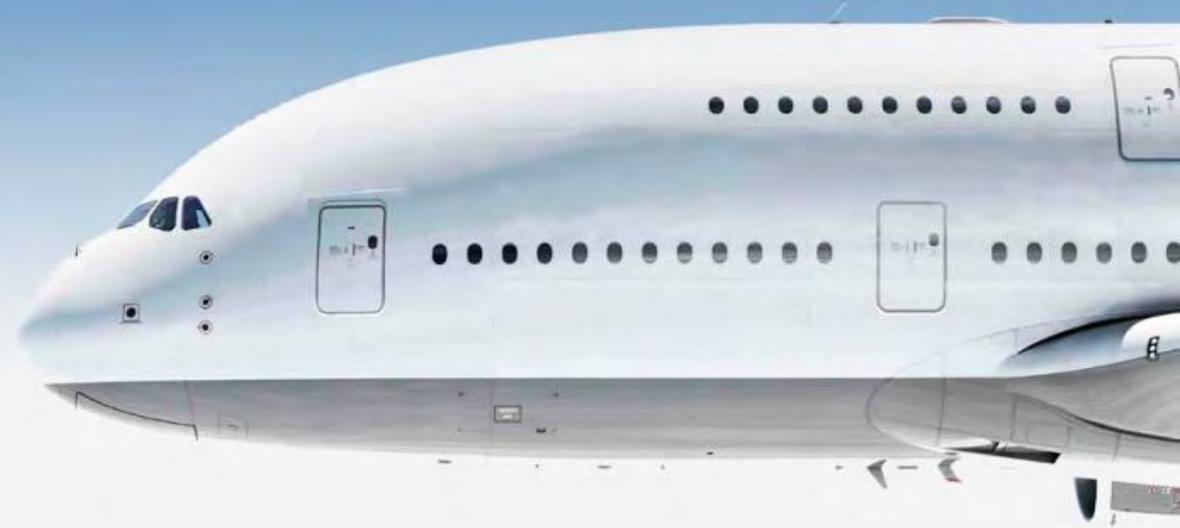
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Any Question ?

Module 6





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Module 7

Formal Course Standards



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Inspector Competency Building Framework



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?



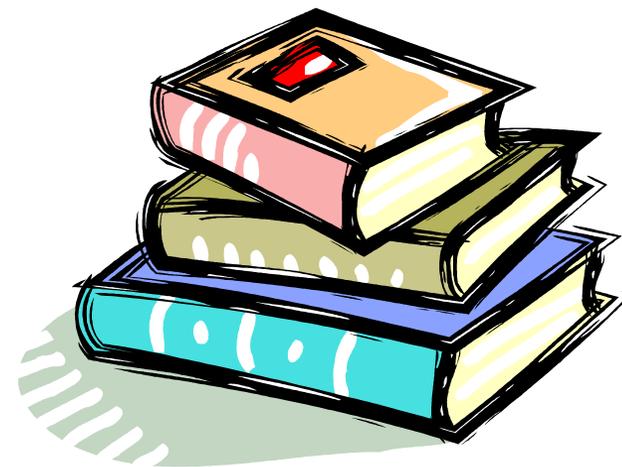
- ✈ What subjects?
- ✈ How many hours?
- ✈ Prerequisites?
- ✈ What is required by ICAO?





Formal Course Standards (FCS)

- ✈ Describes the minimum course content that is required for all formal courses.
- ✈ Organized according to the Training Categories





Course Number	2001
Course Title	Air Operator Certification - Operations
Training Profile	Operations
Training Category	Certification 2.0
Sequence	Initial
Course Length	80 Hours
Course Objective	Objective
Course Description	Narrative Description
Course Content	Required Subjects
Prerequisites	None
Revision Date	June 1, 2019
Course Manager	Flight Standards Training Manager
Associated CAA training Courses	CAA course numbers for website reference

FCS Format

The FCS describes and specifies minimum content for classroom training courses.



Ways to use the FCS

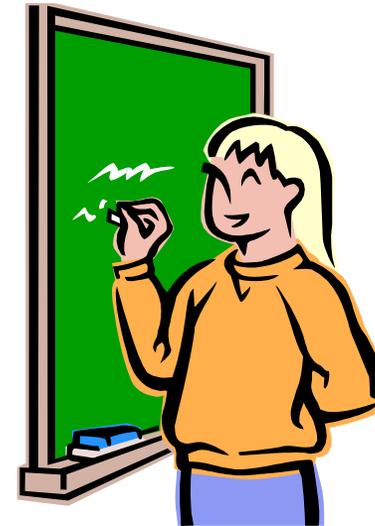
- ✈ Find the minimum standards for formal courses that are acceptable in ICAO and ICBF
- ✈ Compare an existing course to see if it should be provided to your CAA inspectors
- ✈ Specify minimum content for a course you are planning to develop in your department





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 an 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”





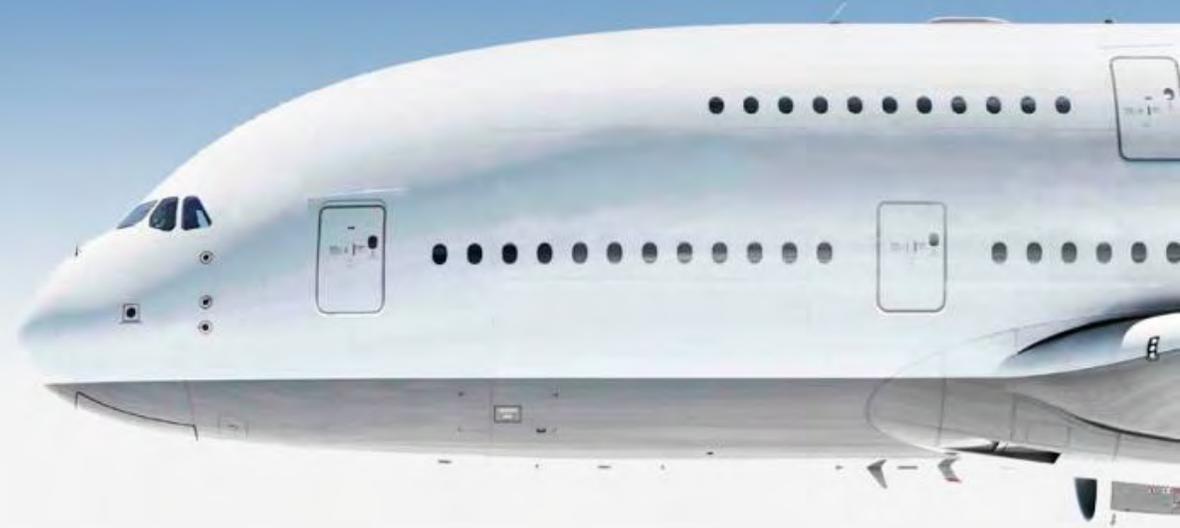
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Any Question ?

Module 7





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Module 8

Job Task Analysis



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Inspector Competency Building Framework



What is a Job Task?

- ✈ A single identifiable unit of work that is regularly accomplished by CAA Inspectors

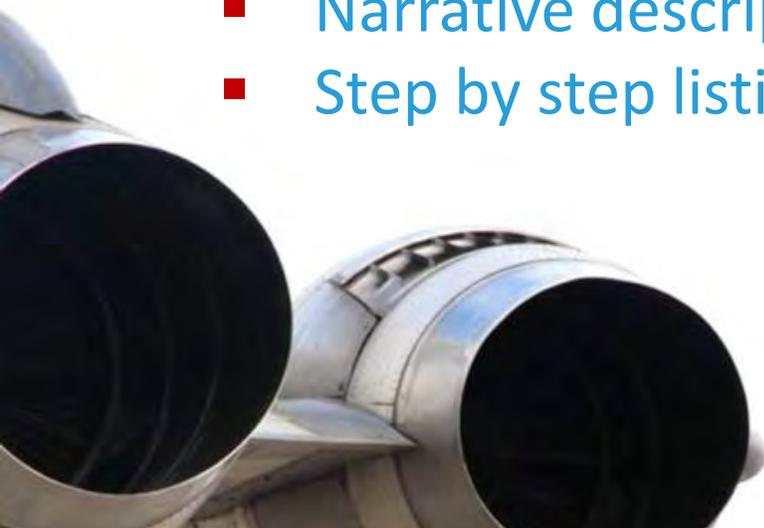




What is a Job Task Analysis?

- ✈ 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



Job Task #:	OPS 3.003
Title:	Conduct Airplane Ramp Inspection
Approval Date:	August 1, 2019
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Inspector Type:	Operations
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Associated CAA Job Tasks #:	2.001
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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

- 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



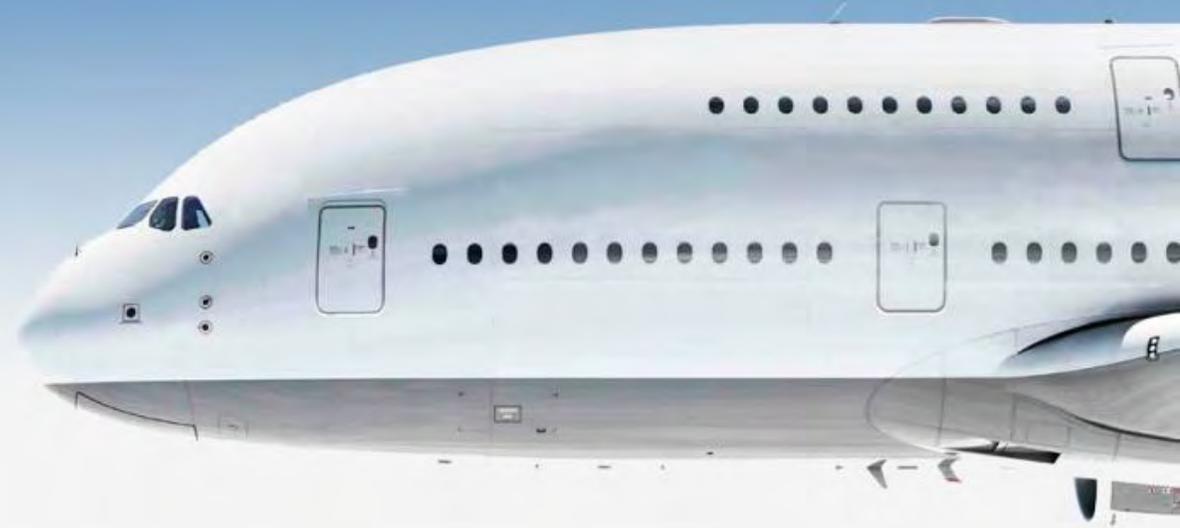
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SAFETY



Any Question ?

Module 8





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SAFETY



Module 9

On-the Job Training Process



ICAO

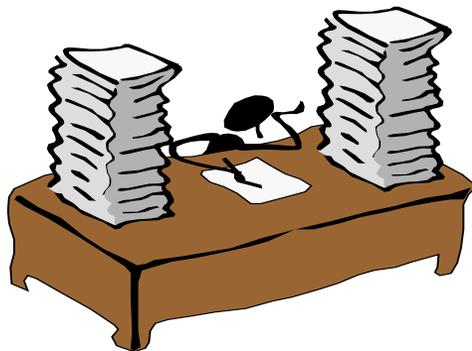
Inspector Competency Building Framework



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

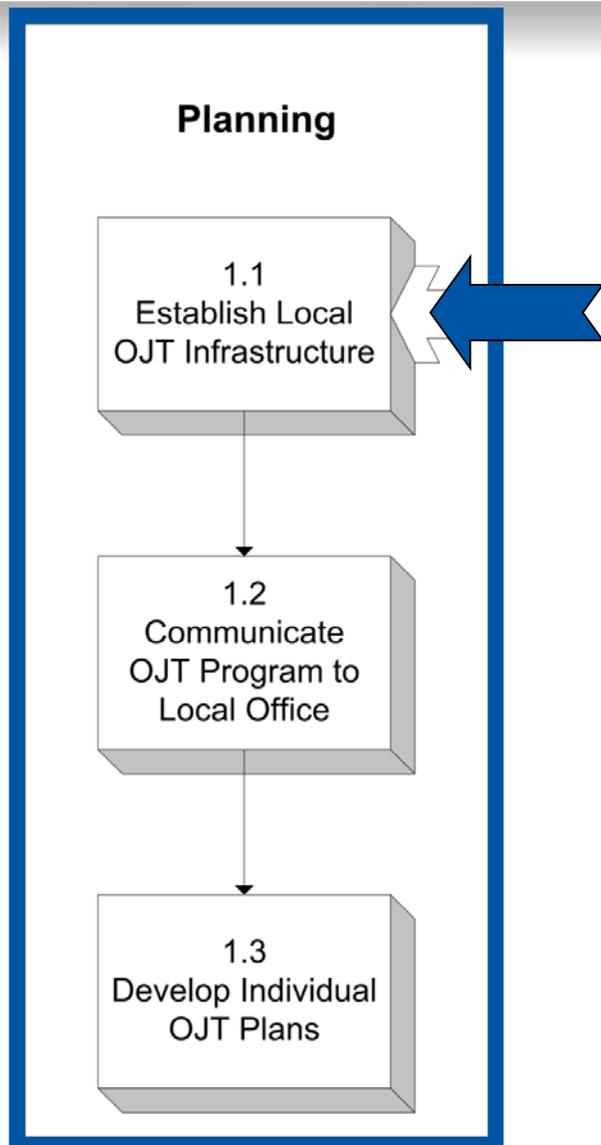
✈ OJT Instructor Process

- Level 1 – Knowledge
- Level 2 – Understand
- Level 3 – Perform





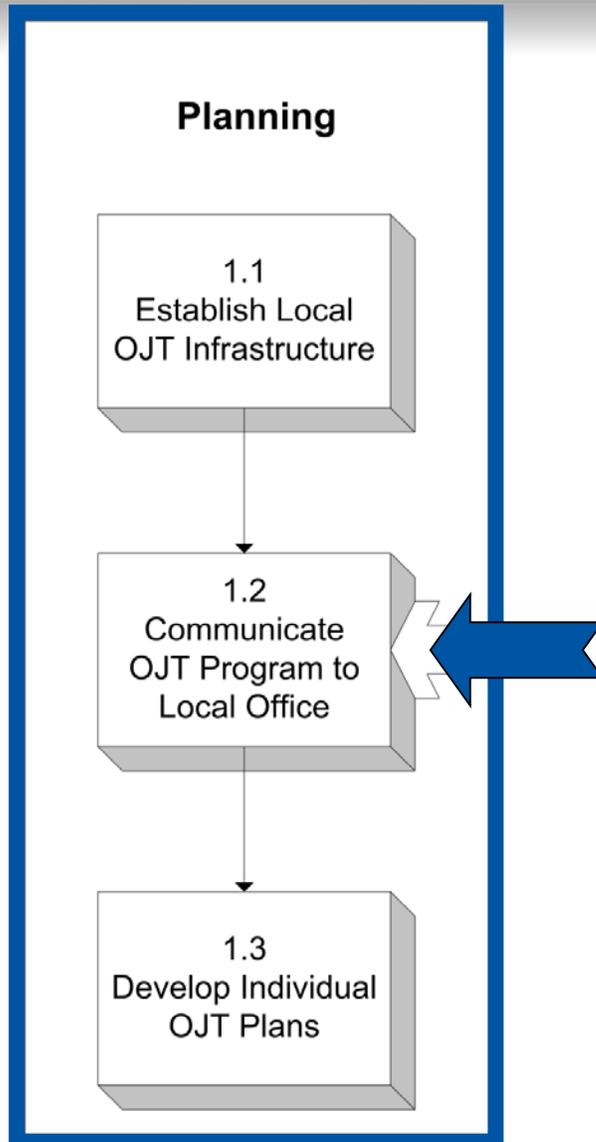
OJT System: Phase I - Planning



1. Select the OJT Program Manager
2. Review the OJT needs of the local office
3. Select OJT Instructors



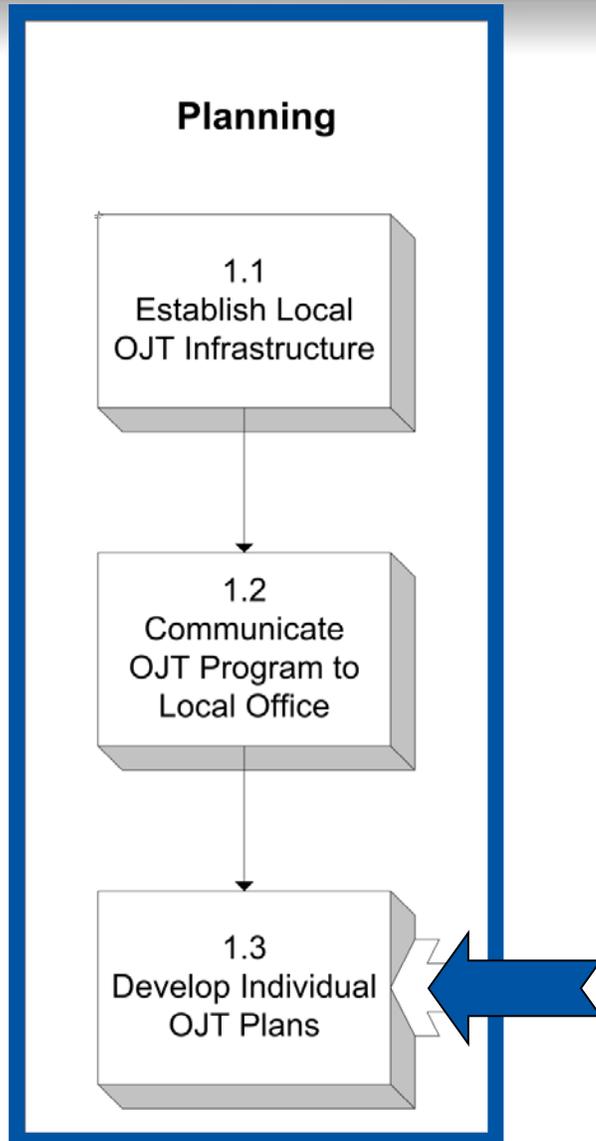
OJT System: Phase I - Planning



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

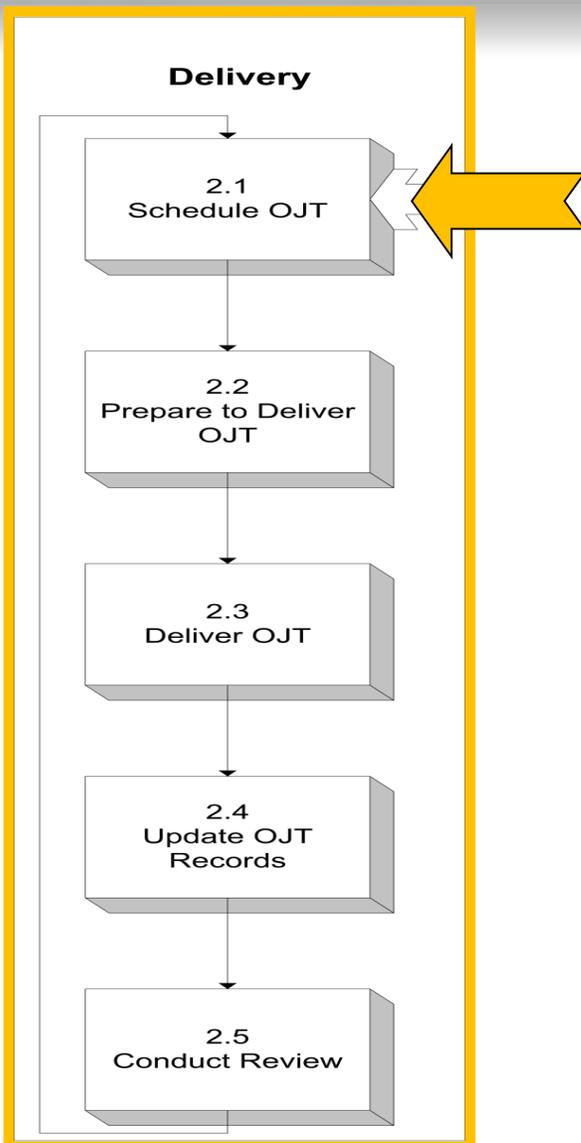


Meet with Each Trainee:

- 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



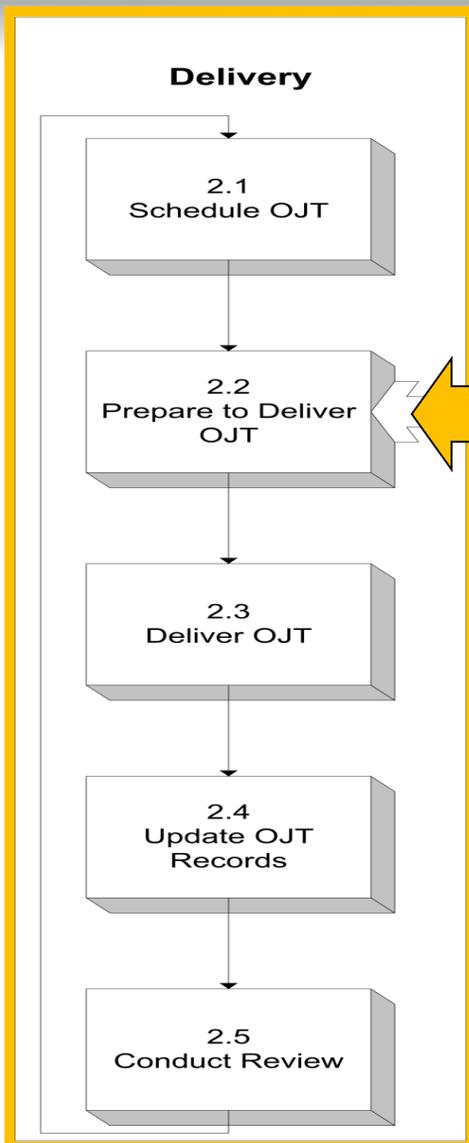
OJT System: Phase II - Delivery



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 → 1.5 hrs for OJT



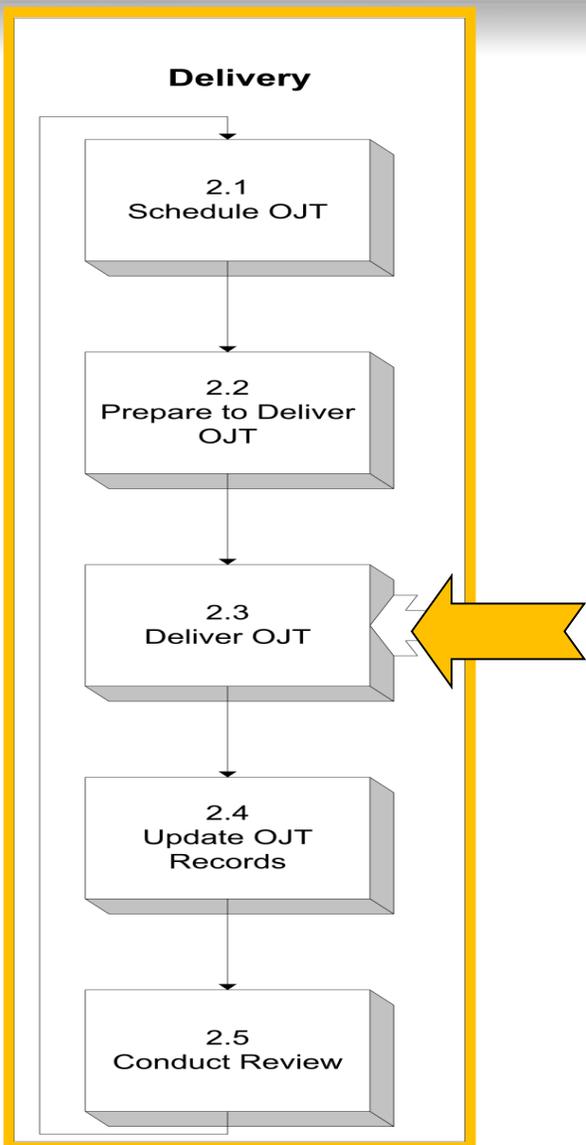
OJT System: Phase II - Delivery



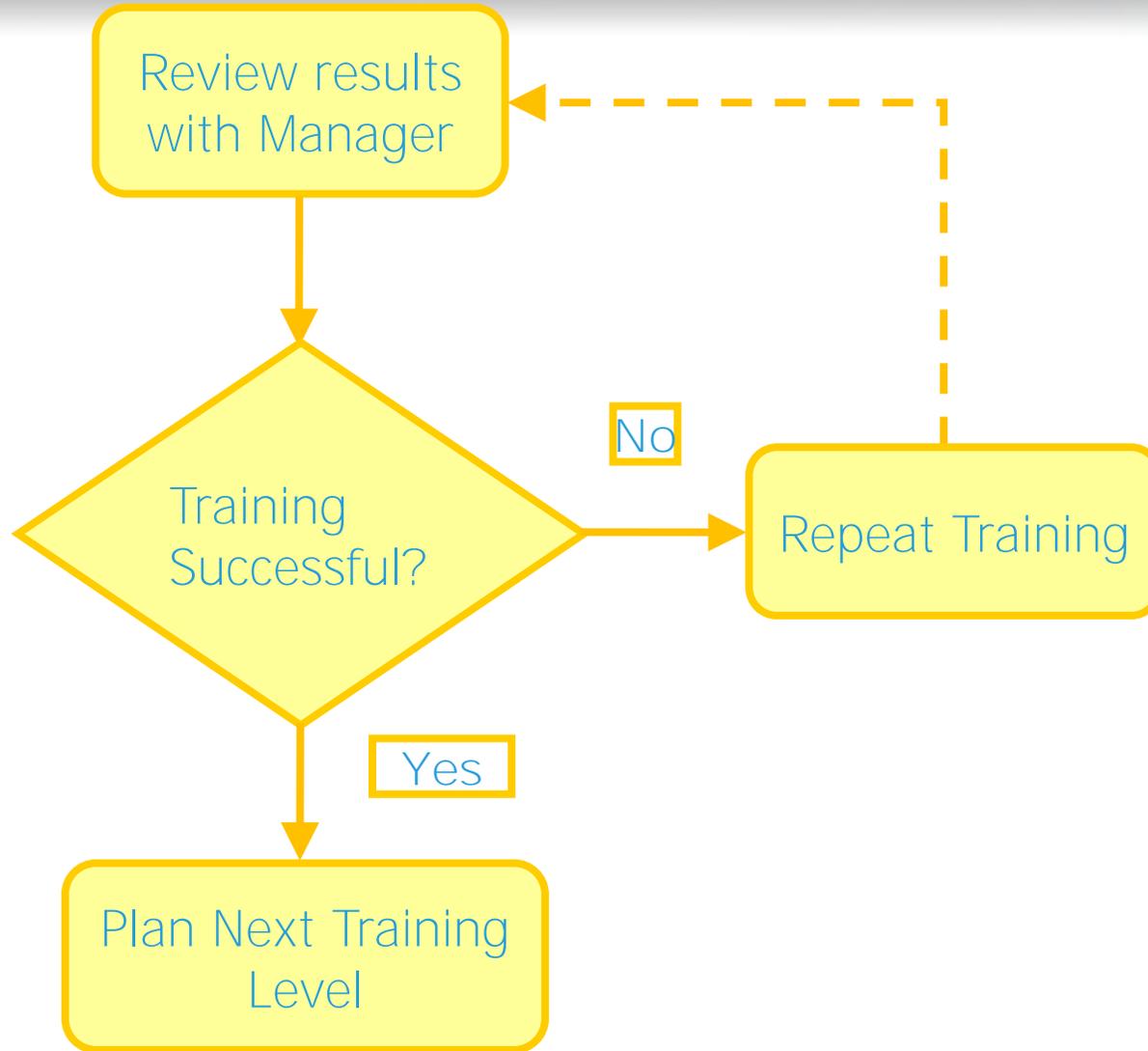
1. Review Job Task Analysis
2. Gather needed equipment
3. Arrange for assistance if needed
4. Create a lesson plan if needed
5. Finalize logistics



OJT System: Phase II - Delivery

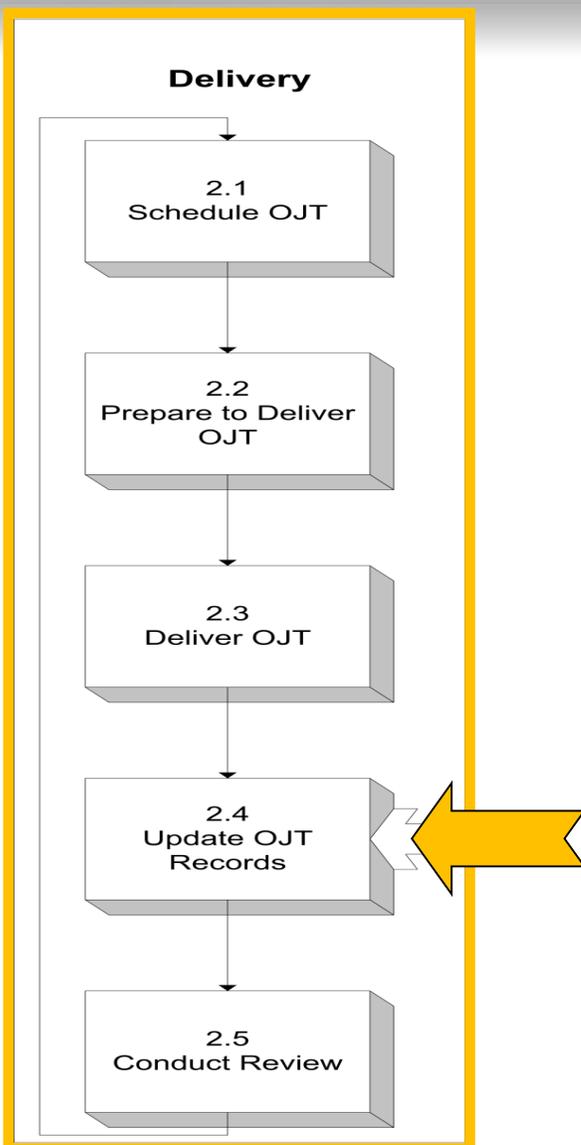


Level	Trainee	Instructor
I Knowledge	Study	Discuss
II Understand	Observe	Demonstrate
III Perform	Perform	Evaluate





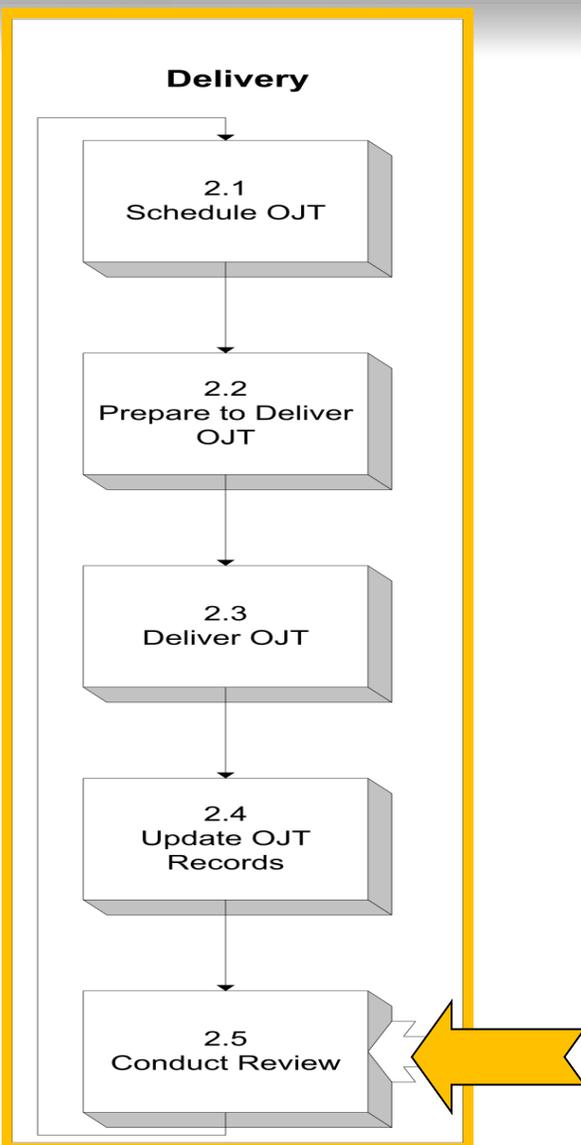
OJT System: Phase II - Delivery



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



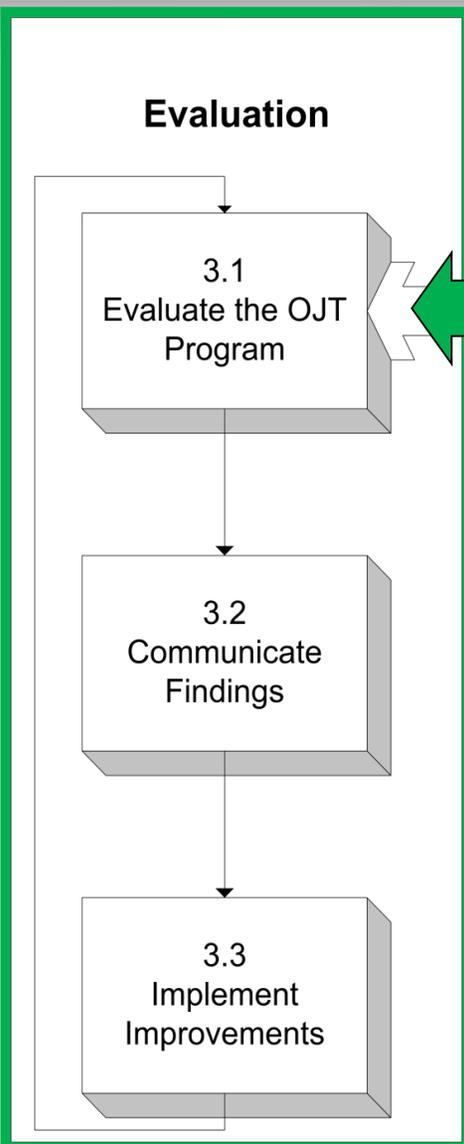
OJT System: Phase II - Delivery



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) is/are not being followed and why? _____

 4. What is the most time-consuming aspect of OJT for you and why? _____

- Is it time 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

Comments

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) is/are not being followed and why? _____

 4. What is the most time-consuming aspect of OJT for you and why? _____

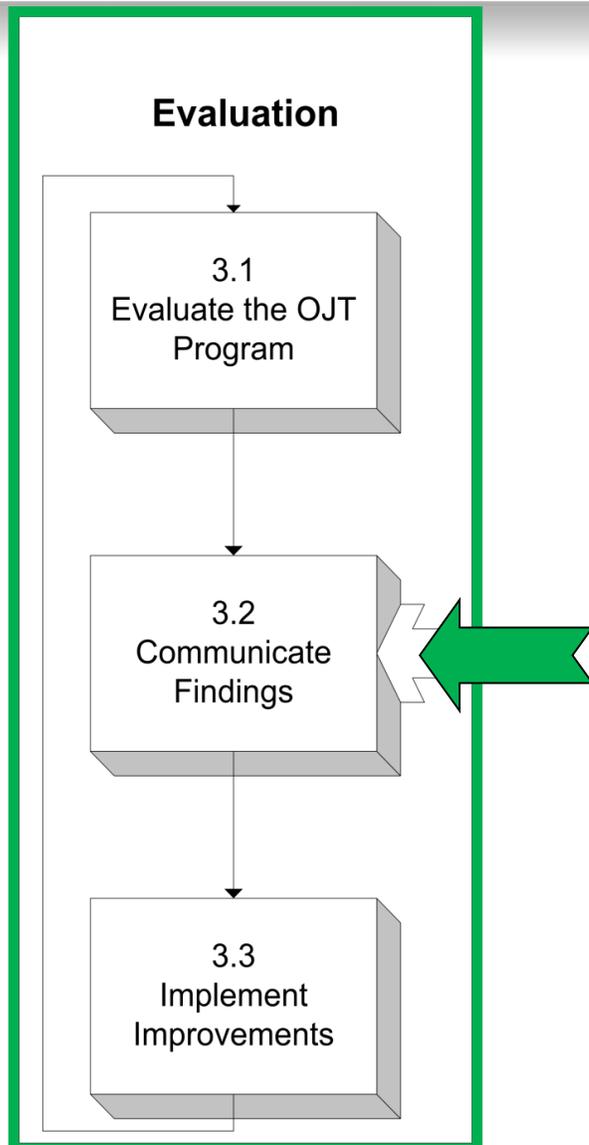
- Is it time well spent? Yes No Don't know
5. Do you find yourself needing to use the expertise of other personnel to deliver OJT? Yes
No
How, and for what subjects? _____

 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? _____



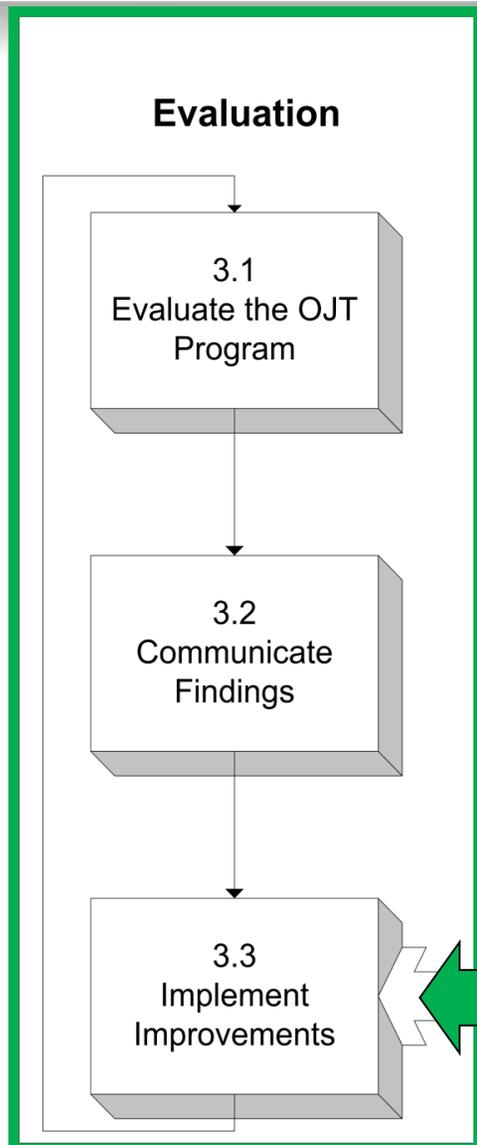
OJT System: Phase III - Evaluation



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**



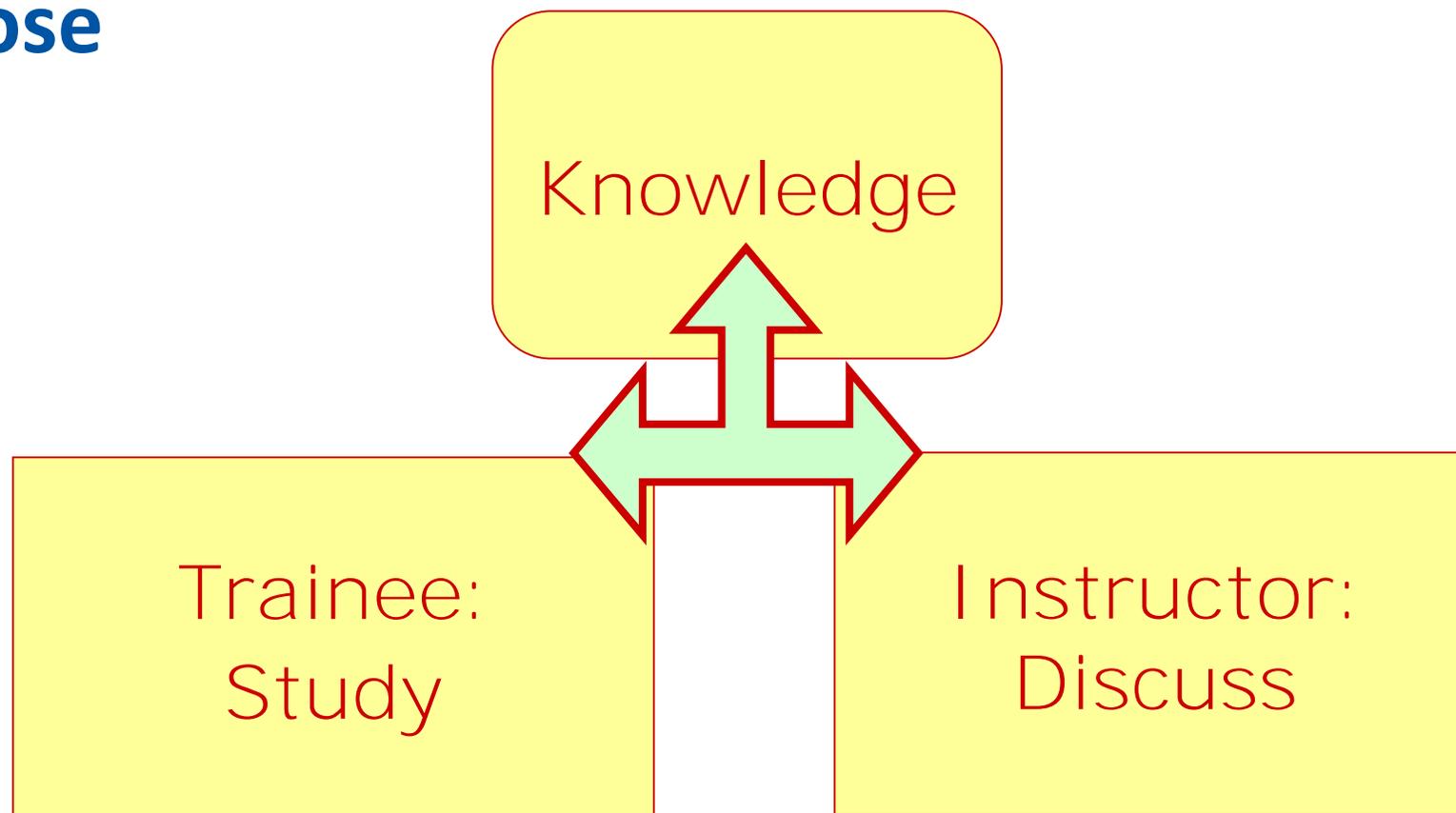


Who authorizes you to conduct OJT once you have completed OJT instructor training?

- a) Training Manager
- b) Supervisor
- c) OJT Program Manager



Level I Purpose





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





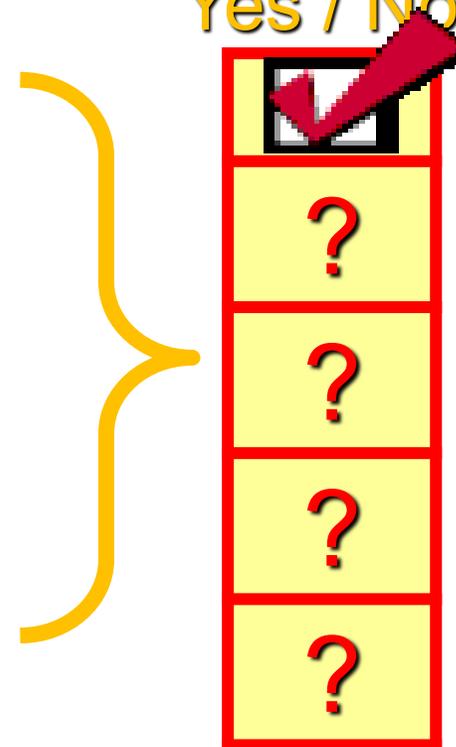
Level I Validation

Can the trainee do these things?

Yes / No

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

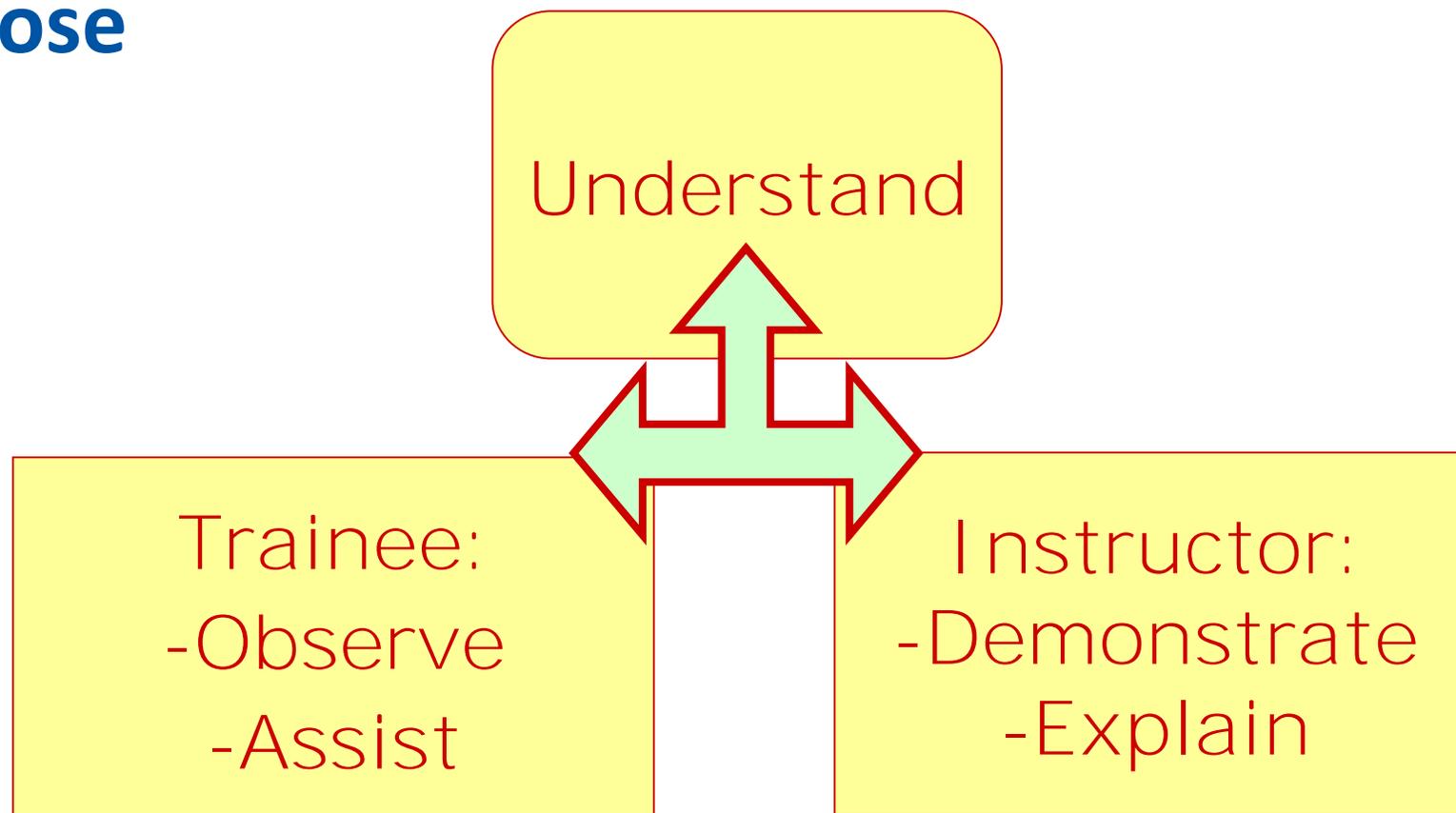
Use the “show me” concept!



Yes / No
<input checked="" type="checkbox"/>
?
?
?
?



Level II Purpose





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

Can the trainee do these things?

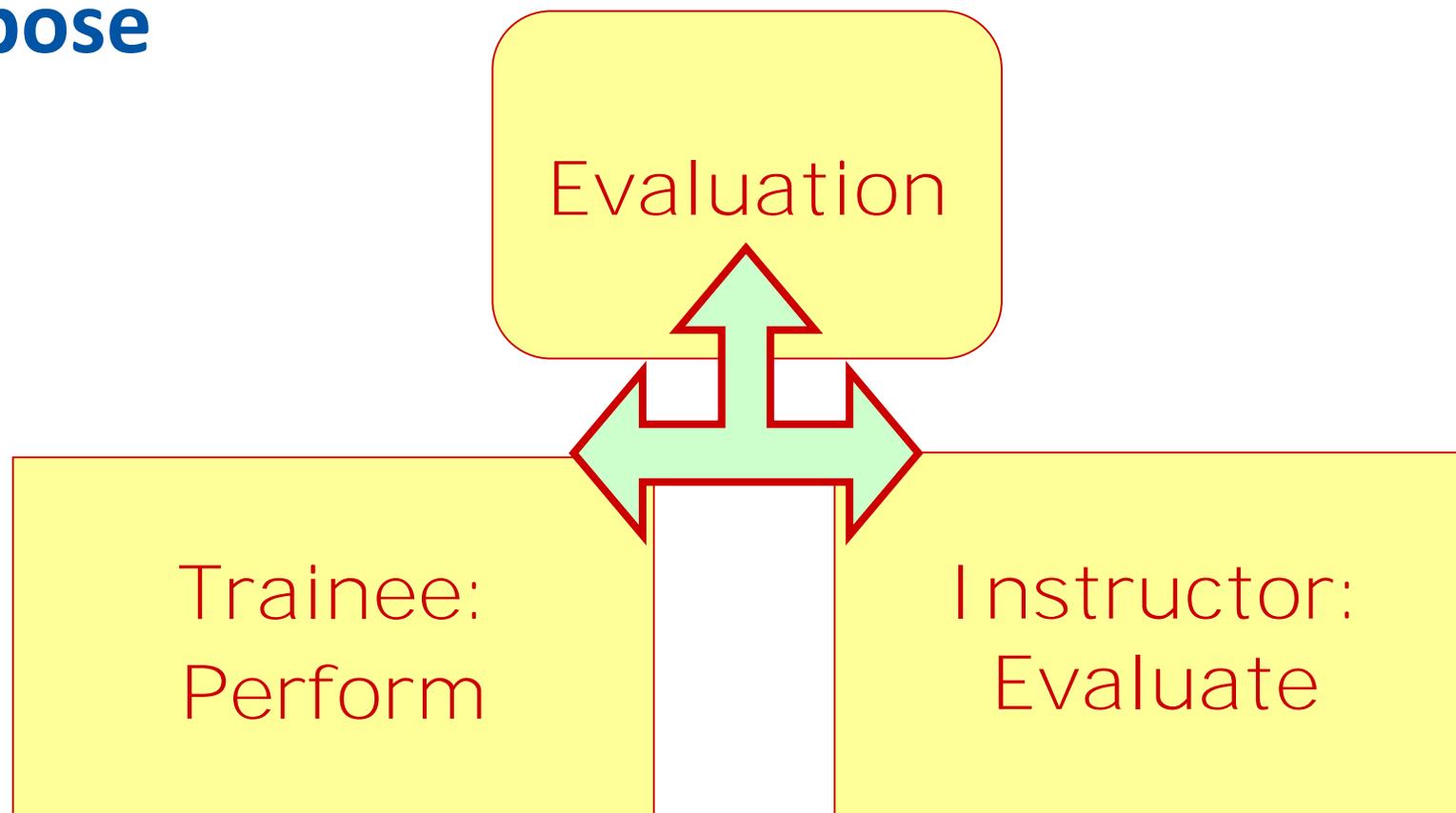
1. Describe sequence of steps to accomplish task
2. Describe how materials, forms, equipment are used
3. Describe interactions with other personnel
4. Describe coordination with operator

Yes / No

<input checked="" type="checkbox"/>
?
?
?



Level III Purpose





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

Can the trainee do these things?

Yes / No

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



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Any Question ?

Module 9





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Module 10

Training Record



ICAO

Inspector Competency Building Framework



ICAO requires a
permanent training record.



Operations Inspector Training Profile Worksheet

Inspector Name:

1.0 Indoctrination

1.000

Formal Course Name: New Employee Orientation

Formal Course Number: 1001

Date Completed:

Task	Description	Planned Date	Level 1		Level 2		Level 3	
			Date	Initials	Date	Initials	Date	Initials
1.001	Employee benefits							
1.002	Time and Attendance							
1.003	Employee Training and Development							
1.004	Office Communications							
1.005	Computer Systems							
1.006	Managing Resources							
1.007	Employee Ethics							
1.008	Labor Unions							
1.009	Conduct and Discipline							
1.010	Travel							
1.011	Security							



Employee Name: Double Dawg Dare
 Discipline: AIR Airworthiness
 Hire Date: 01-Dec-2008
 Position Number: 1144
 Position Description: 06. AIR – Principal Avionics Inspector

Office ID: GL12
 Office Manager: CGM
 Supervisor: CGM
 OJT Instructor: CGM

Employee Data

Course Number: 1001
 Course Name: New Employee Orientation
 Completed Date: 12-Dec-2002 DD-MMM-YYYY

To view entire comment
 1. Click on desired Comment
 2. Press "Shift F2"
 3. Press "Cancel" when done

Total Tasks: 182

Task	Description	Planned Date	Level 1		Level 2		Level 3		Manager Initials	Comments
			Date	Initials	Date	Initials	Date	Initials		
?										
1.001	Employee pay, benefits, leave, health, retirem	15-Dec-2002	15-Dec-2002	CGM	17-Dec-2002	CGM	22-Dec-2002	CGM	CGM	Good Job!
▶ 1.002	Time and Attendance	17-Dec-2002								
1.003	Employee Training and Development Process									
1.004	Office Communications									
1.005	Computer Systems / Info Technology									
1.006	Managing Resources									
1.007	Employee Ethics									
1.008	Labor Unions									
1.009	Conduct and Discipline									
1.010	Travel and Per Diem									
1.011	Security									
2.001	Cert Phase I: Preapplication Phase - (Gate I)									
2.002	Cert Phase II: Formal Application Phase - (Ga									
2.003	Cert Phase III: Document Compliance Phase									

Save and Close

Cancel



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 Discipline: AIR Airworthiness
 Hire Date: 01-Dec-2008
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Office ID: GL12
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Formal Course

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Save and Close

Cancel



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1.003	Employee Training and Development Process					
1.004	Office Communications					
1.005	Computer Systems / Info Technology					
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1.007	Employee Ethics					
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Job Task List

Save and Close

Cancel



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2.003	Cert Phase III: Document Compliance Phase									

OJT for each Job Task



Management Reports

Formal Course Training report

Page 1 of 2
Date: 05-Mar-09

OFFICE Number of Inspectors Assigned to the Office:

Course Name	Course Number	Number Who Have Completed this Course	Did Not Complete	Percent Completed
New Employee Orientation	1001	<input type="text" value="1"/>	2	<input type="text" value="33%"/>
Air Operator Certification - AIR	2003	<input type="text" value="1"/>	2	<input type="text" value="33%"/>
Air Operator Surveillance - AIR	3003	<input type="text" value="1"/>	2	<input type="text" value="33%"/>
Personnel Licensing Procedures - AIR	4003	<input type="text" value="1"/>	2	<input type="text" value="33%"/>
Aviation Training Organizations - AIR	4503	<input type="text" value="1"/>	2	<input type="text" value="33%"/>
Compliance and Enforcement	5001	<input type="text" value="1"/>	2	<input type="text" value="33%"/>
Aircraft Accident Investigation	5501	<input type="text" value="1"/>	2	<input type="text" value="33%"/>
Aircraft Certification - AIR	6003	<input type="text" value="1"/>	2	<input type="text" value="33%"/>

OFFICE Number of Inspectors Assigned to the Office:

Course Name	Course Number	Number Who Have Completed this Course	Did Not Complete	Percent Completed
New Employee Orientation	1001	<input type="text" value="2"/>	21	<input type="text" value="9%"/>
Air Operator Certification	2001	<input type="text" value="1"/>	22	<input type="text" value="4%"/>



Training Record Software

- ✈ Runs on Application or Training Record Software.
- ✈ Includes both formal courses & OJT.
- ✈ Automated reports for managers.
- ✈ Provides 3 secure access levels.





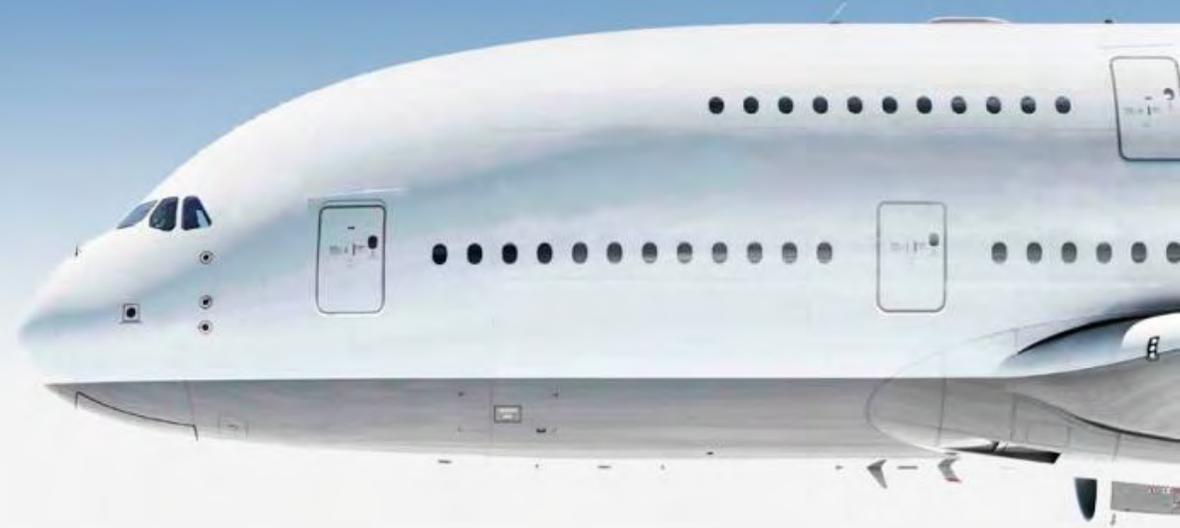
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SAFETY



Any Question ?

Module 10





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Module 11

Next Steps



ICAO

Inspector Competency Building Framework



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.





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SAFETY



THANK YOU!