



# Civil Aviation Authority of Malaysia



Implementation of

## **GRF-RCR & Runway Inspector Program**

- The CAAM Perspective -

# Objectives



The main objective is to ensure aerodrome personnel trained in the relevant fields of competence and their competence verified in a manner required by the State (CAAM) to ensure confidence and accuracy in their assessments.

A14 vI  
2.9.4



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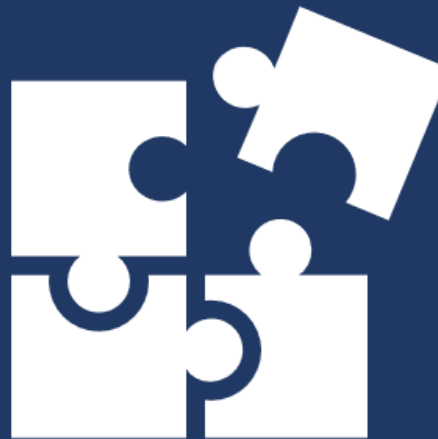
Train the Trainer Session in Malaysia

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# GRF-RCR Implementation Roadmap



CLEAR OBJECTIVE

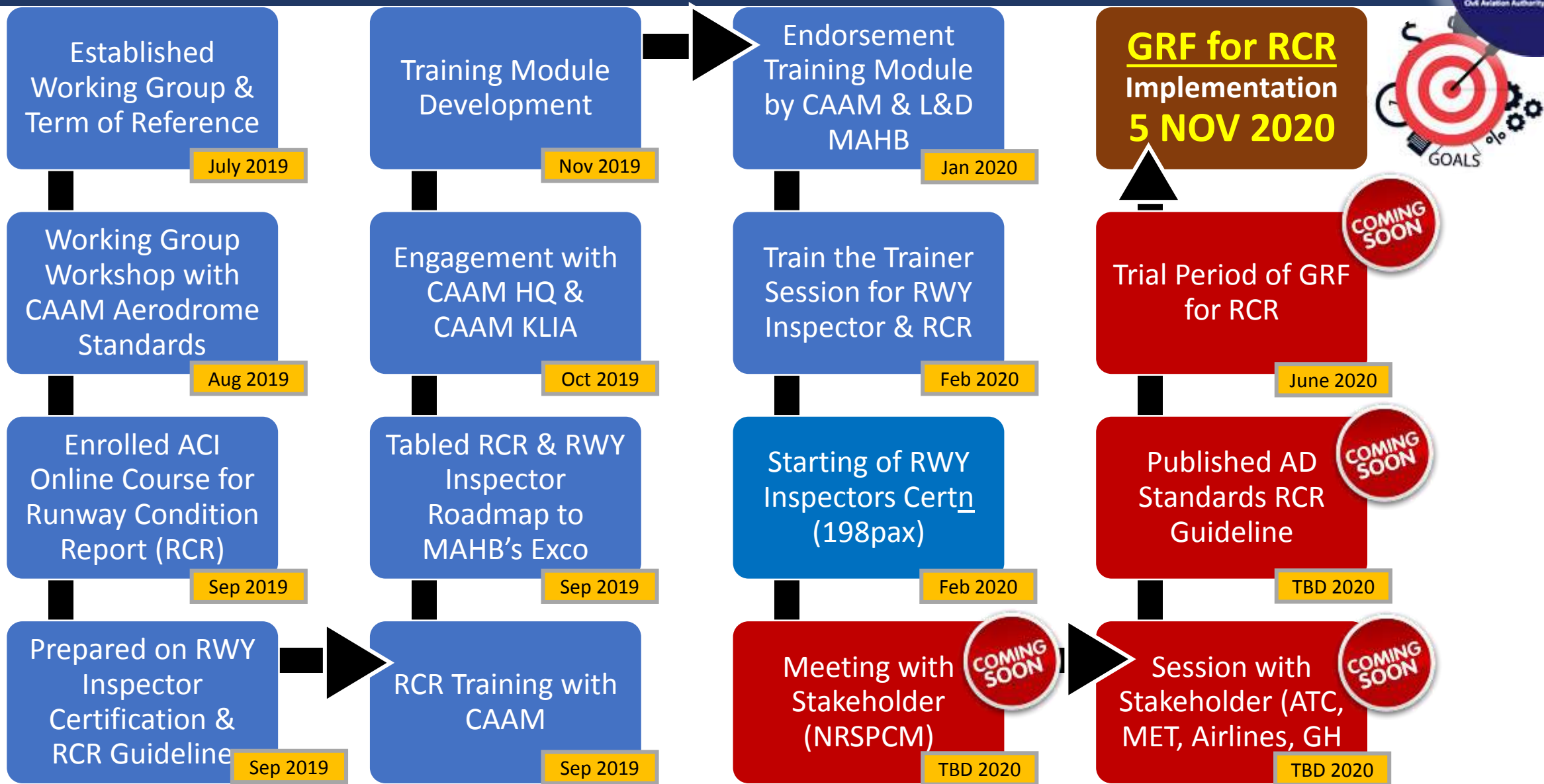


TOTAL RUNWAY  
INSPECTION IMPROVEMENT



REGIONAL COORDINATION

# Malaysia Roadmap for GRF-RCR Implementation



2

# Certified Runway Inspector (CRI) Program



CLASSROOM  
SESSION



MANDATORY  
COURSES



COMPREHENSIVE  
ASSESSMENT



COMPETENT RUNWAY  
INSPECTOR

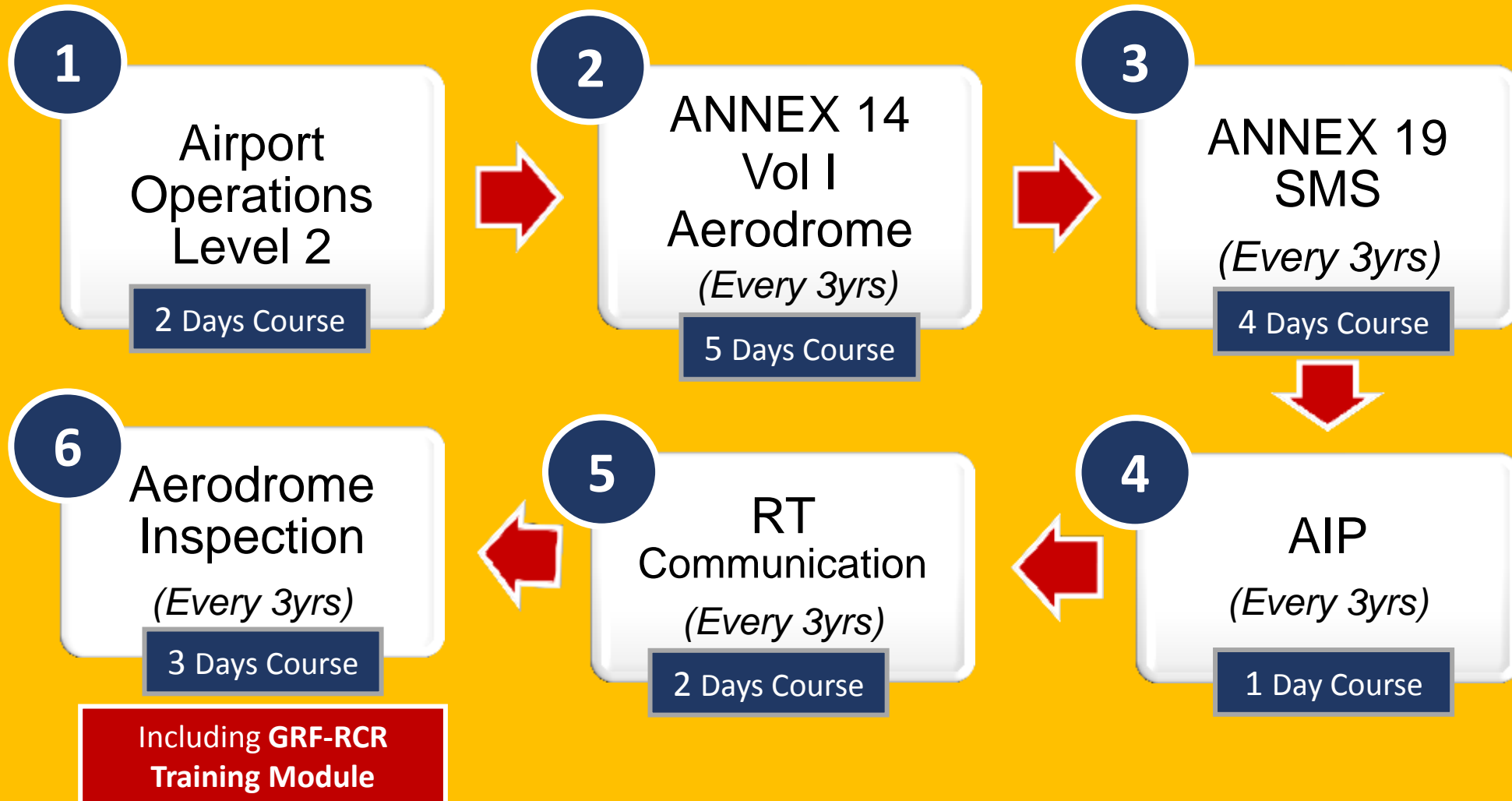


APPROVED &  
CERTIFIED BY CAAM



# Mandatory **Six (6) Training Modules** you need to attend prior becoming **Certified Runway Inspector (CRI)**

## How to become **Certified Runway Inspector (CRI)?**



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# Training Modules for **CRI & GRF-RCR**



**CLASSROOM  
SESSION**



**INDIVIDUAL  
ASSESSMENT**



**COMPREHENSIVE  
MODULES**



**COMPETENCY  
CHECK**

# Overview of Annex 14 vol. I - Aerodrome Modules



Chapter	Contents
<b>1</b>	Basic Aerodrome (Introduction)
<b>2</b>	Annex 14 Amendment Chapters in Annex 14 Definition
<b>3</b>	ICAO Doc. 9981 – Procedures for Air Navigation Services (PANS Aerodromes)
<b>4</b>	Runway / Aerodrome Reference Code
<b>5</b>	Runway End Safety Area Clearway & Stopway
<b>6</b>	Specific Procedure for AD Operations / Holding Position/ Apron
<b>7</b>	Taxiway
<b>8</b>	AIP NOTAM
<b>9</b>	AGL & Electrical System

Chapter	Contents
<b>10</b>	Obstacle Limitation Surface (OLS)
<b>11</b>	Visual Aids Denoting Restricted use area
<b>12</b>	Markers Denoting Obstacle
<b>13</b>	Aerodrome Data / MEHT
<b>14</b>	Aerodrome Operations
<b>15</b>	Aerodrome Maintenance
<b>16</b>	Markings & Signs
<b>17</b>	Airport Emergency Plan
<b>18</b>	Rescue Fire Fighting
<b>19</b>	Examination - Knowledge Check

# Overview of Annex 19 - SMS Modules



Chapter	Contents
<b>1</b>	<b>Safety Risk Management</b>
<b>2</b>	<b>HIRARC Template</b>
<b>3</b>	<b>HIRARC Template Exercise</b>
<b>4</b>	<b>Safety Assessment</b>
<b>5</b>	<b>Safety Assessment &amp; Exercise</b>
<b>6</b>	<b>Acceptable Level of Safety Performance (ALoSP)</b>

Chapter	Contents
<b>7</b>	<b>Safety Investigation Report</b>
<b>8</b>	<b>Safety Promotion &amp; Exercise</b>
<b>9</b>	<b>SMS Implementation Plan File &amp; Exercise</b>
<b>10</b>	<b>Airside Safety Culture Survey</b>
<b>11</b>	<b>Knowledge Check</b>
<b>12</b>	<b>Aircraft Incident &amp; Lesson learned</b>

# Overview of AIP Modules



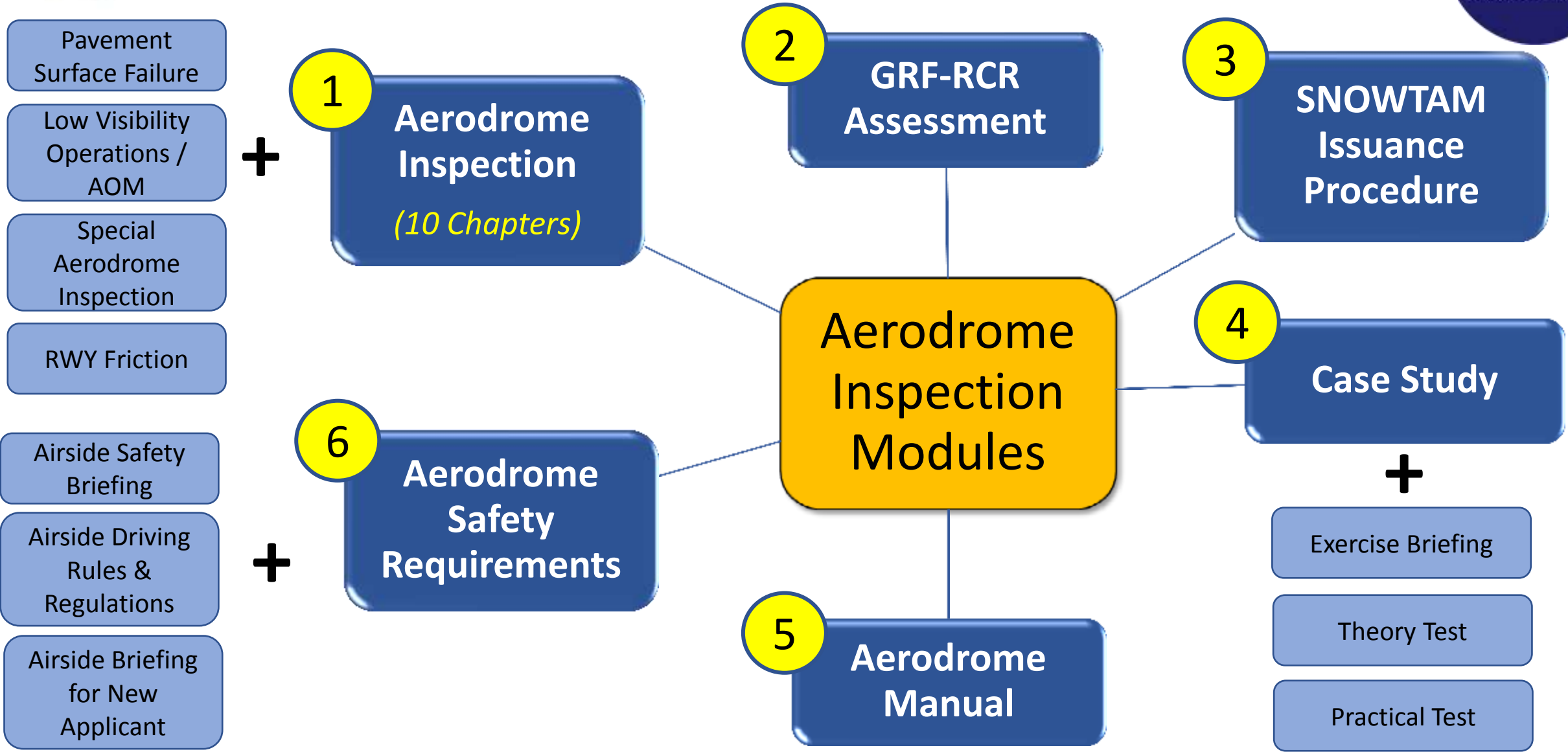
Chapter	Contents
<b>1</b>	Reference Document
<b>2</b>	Definition
<b>3</b>	AIRAC Cycle
<b>4</b>	AIP Content- GEN
<b>5</b>	AIP Content – ENR
<b>6</b>	AIP Content – AD
<b>7</b>	AIP Amendment & Supplements

# Overview of RT Modules



Chapter	Contents
1	Introduction to communication
2	Communication in ATS
3	Vocabulary and abbreviations
4	RT Procedures and Phraseologies
5	Group assignment
6	Individual Practical Assessment

# Overview of Aerodrome Inspection Modules



# Contents of Aerodrome Inspection Modules



Chapter	Contents	Chapter	Contents
<b>1.1</b>	Standard Operating Procedure (SOP)	<b>1.6</b>	Taxiway Inspections
<b>1.2</b>	Runway Inspections	<b>1.7</b>	Taxiway Strip Inspections
<b>1.3</b>	Runway Strip Inspections	<b>1.8</b>	Apron Inspections
<b>1.4</b>	Runway End Safety Area (RESA) Inspections	<b>1.9</b>	Perimeter Road Inspections
<b>1.5</b>	Aeronautical Ground Lights (AGL) Inspections	<b>1.10</b>	Special Inspections

# Contents of GRF-RCR Modules



Chapter	Contents
<b>1</b>	<b>Overview of Global Reporting Format</b> <ul style="list-style-type: none"><li>- Introduction</li><li>- Background</li></ul>
<b>2</b>	<b>Implementation of Global Reporting Format</b> <ul style="list-style-type: none"><li>- Runway Condition Report (RCR)</li><li>- Runway Condition Code (RWYCC)</li><li>- Runway Condition Matrix (RCAM)</li></ul>
<b>3</b>	<b>ICAO Provision and Guidance Material</b>
<b>4</b>	<b>Runway Condition Assessment</b>
<b>5</b>	<b>Reporting</b> <ul style="list-style-type: none"><li>- Runway Condition Assessment Worksheet</li><li>- SNOWTAM</li></ul>

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# Train the Trainer Session

in collaboration with MAHB



LEAD BY EXAMPLE



RUNWAY INSPECTORS



REGIONAL COOPERATION



CERTIFIED RUNWAY  
INSPECTOR



Opening Remarks by **CAA of MALAYSIA (CAAM)**



Classroom Session by **Malaysia Airports**

# **Train the Trainer Session** on 10-12 Feb 2020 at **Malaysia Airports Training Centre (MATC)**

# Train the Trainer Session on 10-12 Feb 2020



Site Preparation for **Mock Up RWY & TWY** at Training Centre


# Train the Trainer Session on 10-12 Feb 2020



## Practical Assessment 01

Exercise on Runway Condition Reporting (RCR)  
Exercise 5:


Portion of Runway:	Defects on Runway
1/3	No defects.
2/3	1. Water patch, 15m (dia.) x 6mm. 2. Water patch, 12m (dia.) x 6mm (D), 9m (dia.) x 12mm (D)
3/3	1. Water patch, 4m (dia.) x 5mm (D).



## Practical Assessment 02

Exercise on Runway Condition Reporting (RCR)  
Exercise 6:


Portion of Runway:	Defects on Runway
1/3	1. Water patch, 8m (L) x 10mm (D) 2. Water patch, 12m (dia.) x 6mm (D)
2/3	No defects.
3/3	1. Water patch, 4m (dia.) x 5mm (D). 2. Water patch, 5m (L) x 45m (W) x 10mm (D)



## Practical Assessment 03

Exercise on Runway Condition Reporting (RCR)  
Exercise 7:

Portion of Runway:	Defects on Runway
1/3	No defects.
2/3	1. Water patch, 3m (dia.) x 5mm (D) 2. Water patch, 13.5m (dia.) x 6mm (D) 3. Water patch, 22m (dia.) x 10mm (D)
3/3	1. Water patch, 5m (dia.) x 3mm (D) 2. Water patch, 20m (dia.) x 3mm (D)




Group Practical Assessment

# Train the Trainer Session on 10-12 Feb 2020



On Site Assessment



Measurement Activities

Setting mock up area on Runway

Filling up RCR Forms

# Train the Trainer Session on 10-12 Feb 2020



Measuring “affected area” on the runway



CRI is requesting approval from ATC prior entering active RWY



CRI is “measuring the water depth” on the runway



“Teamwork is the Key to Success”

# Train the Trainer Session on 10-12 Feb 2020



**Closing Ceremony & Certificate Awarding**





Official Implementation Date for  
**GRF-RCR in MALAYSIA** is 5<sup>th</sup> Nov 2020...



# GRF-RCR implementation in Malaysia is a collaboration between **CAAM & Airport Operator, MAHB**



On 5 November 2020, THE GLOBAL REPORTING FORMAT for runway surface conditions, will become applicable worldwide.

