



Aerodrome Certification Experience of Mattala Rajapaksa International Airport (MRIA)

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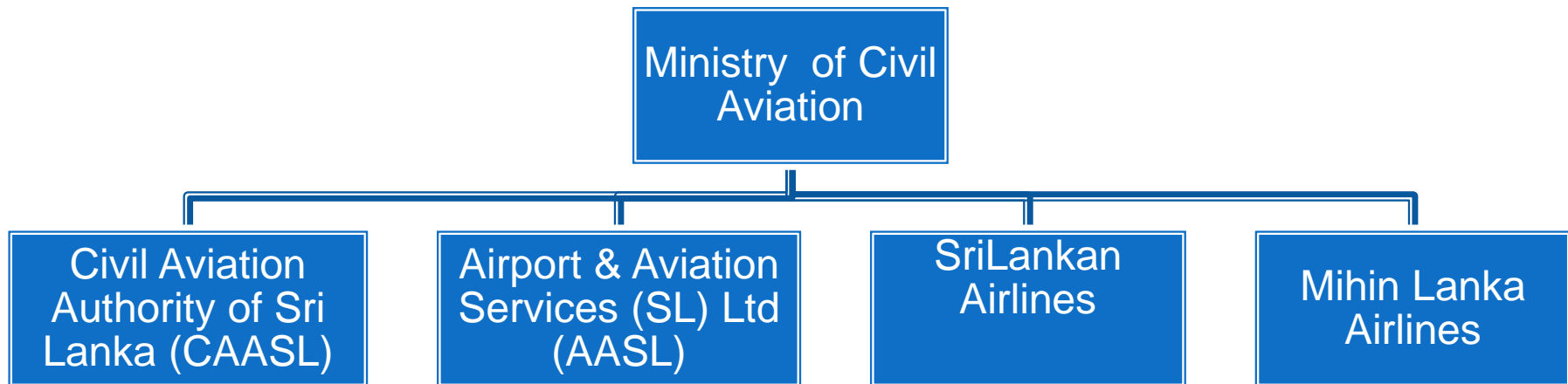
Overview

- ▶ Organizational Structure, Legislative Provisions and Guidance Materials for Aerodrome Certification in SL
- ▶ MRIA - Introduction
- ▶ Strategy Used for the Certification of MRIA
- ▶ ICAO Assistance
- ▶ Operational Readiness Assessment
- ▶ Final Audit
- ▶ Audit Findings and Rectification
- ▶ Certification of MRIA

Introduction

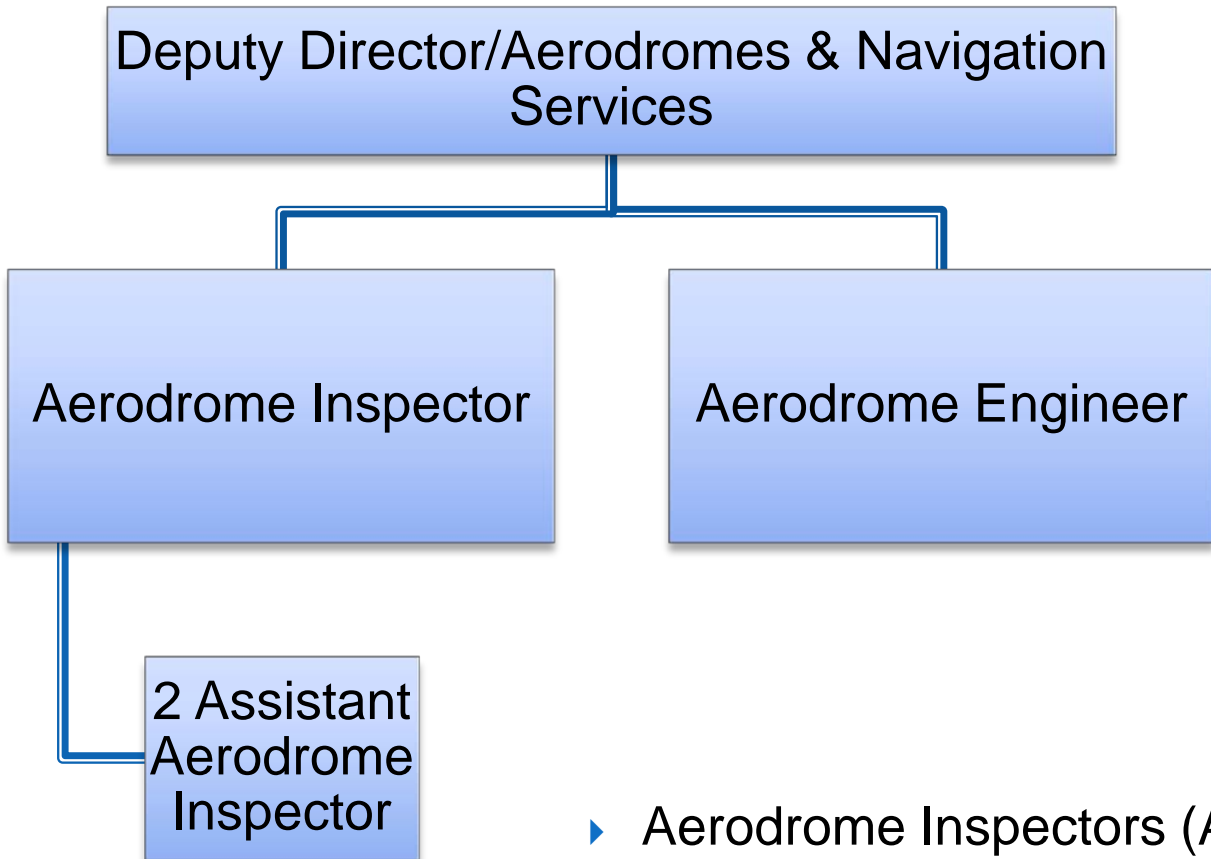


Organizational structure





Civil Aviation Authority



- ▶ Aerodrome Inspectors (AI) – 1
- ▶ Aerodrome Engineer – 1
- ▶ Asst. Aerodrome Inspectors (AAI) – 2

LEGISLATIVE PROVISIONS / GUIDANCE MATERIALS



- ▶ Civil Aviation Act No. 14 of 2010
 - DGCA has been given Powers to Certify Civil Aerodrome in Sri Lanka

- ▶ Regulations
 - Aerodrome Certification Regulations – IS 37
 - Aerodrome Standards – IS 30

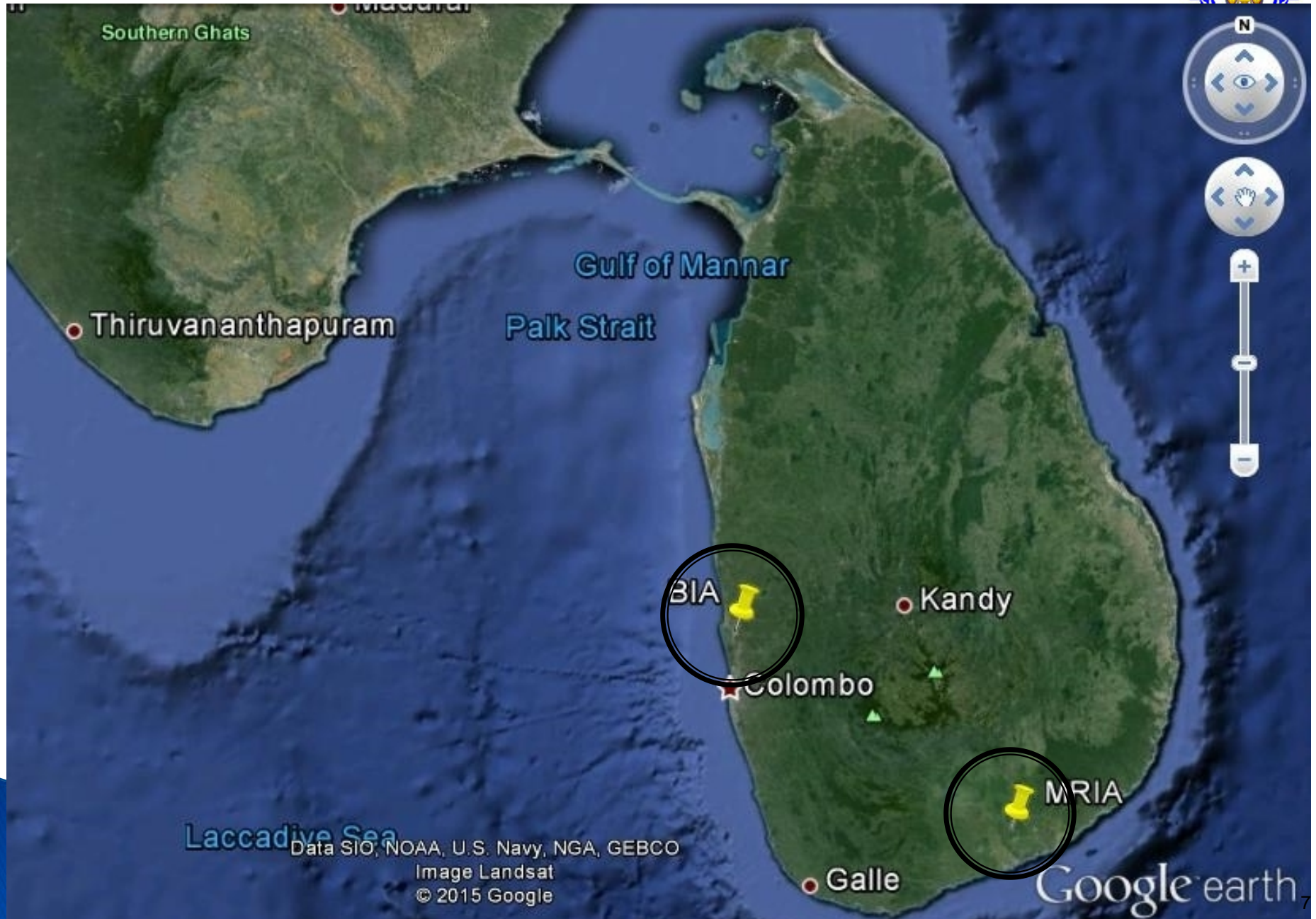
- ▶ Guidance Materials
 - Manual of Aerodrome certification Procedures – SLCAP 2000
 - Aerodrome Inspectors Hand Book – SLCAP 2200



MRIA – INTRODUCTION

- ▶ Sri Lanka has two International Airports
- ▶ Main International Airport is “Bandaranaike International Airport” – BIA
- ▶ “Mattala Rajapakse International Airport” - MRIA was constructed in the Southern Part of Sri Lanka as an alternate airport to BIA
- ▶ At present this Airport is operated as the Second International Airport in Sri Lanka
- ▶ The Airport was opened for operations in 18th March 2013

Location - MRIA





General Details/Capacity

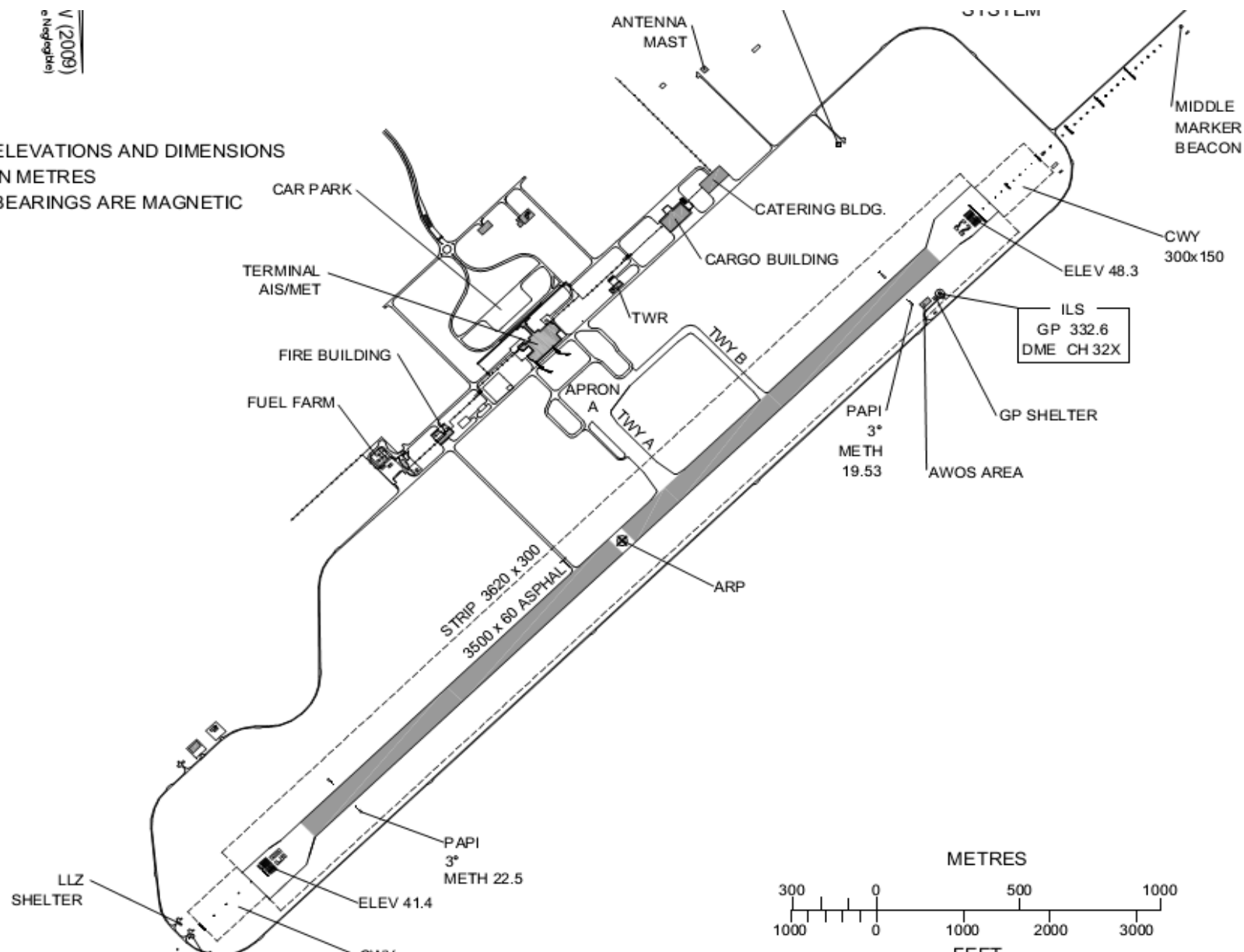
1. ICAO Location Indicator - VCRI
 2. IATA Code - MRI
 3. Runway Length – 3500m, Width – 60m
 4. Aerodrome Code – 4F
-
3. Capacity
 - Terminal– 800 passengers / Hr
 - Apron – 10 – 3C category acft or 06 – 3C + 4F Cat. Acft + 4E Cat acft
 - Runway – 12 movements per Hour (Dep. + Arr.)

AIR SIDE PLAN



V (2009)
e(Nep/ghk)

ELEVATIONS AND DIMENSIONS
IN METRES
BEARINGS ARE MAGNETIC





MRIA



MRIA



MRIA





CERTIFICATION OF MRIA

AERODROME CERTIFICATION



- ▶ Aerodrome Certification Involves Two Parts
 - Review Aerodrome Manual
 - Review the data related to Aerodrome Physical Characteristics, Equipments, Services and aerodrome operating procedures which are included in the Aerodrome Manual
 - On site Audit
 - Verify above **data** given in the manual physically,
 - Check whether **Aerodrome Operating Procedures** given in the manual are correctly followed by the Aerodrome Operating Staff and
 - Aerodrome Operator has employed adequately qualified and competent staff to operate aerodrome activities as per Aerodrome Manual



CERTIFICATION AUDIT OF MRIA



- ▶ Check all physical characteristics of the aerodrome are designed in accordance with AN14 requirements
- ▶ This includes runway, taxiways, apron, navigational aids, fire and rescue facilities etc...
- ▶ Check whether all aerodrome operating procedures and services given in the AM are appropriate and adequate for the operation of the airport
- ▶ We Started this process in January 2012 which is 1Yr and 3 Mths before the expected date of opening.

AERODROME CERTIFICATION PREPARATION COMMITTEES



Committee from CAA

- ▶ DD/A&NS
- ▶ Aerodrome Inspectors (02)
- ▶ Aerodrome Engineer
- ▶ Air Navigation Inspector
- ▶ AIS Inspector
- ▶ Fire & Rescue Expert

Committee from Aerodrome Operator (AASL)

- ▶ Executive Director – AASL
- ▶ Head of Airport Management
- ▶ Head of Civil Engineering/Project Manager of Airport Construction Project
- ▶ Head of Electronics
- ▶ Head of Electrical
- ▶ Head of Fire & Rescue
- ▶ Head of Aviation Security
- ▶ Head of Maintenance Department



CERTIFICATION OF MRJA

- ▶ Aerodrome Certification Preparation Committee Meetings were held monthly to monitor the progress
- ▶ The first Aerodrome Certification Committee Meeting was held in 9th January 2012, about 1 yr and 3 months before the scheduled date to open the airport



CERTIFICATION OF MRIA



- ▶ Came to a decision to use a new strategy for the certification Audit which we named as “phase approach”.
- ▶ Under the “phase approach” both organizations agreed to conduct the audit phase by phase.
- ▶ Under this method AASL agreed to inform CAA the completion of different parts of the Airport.
- ▶ CAA agreed to conduct the inspections/audit of that part when they inform the completion of that part.



Audit



Area	Approval of Design Plan	Physical Inspection
Runway Markings	✓	✓
Taxiway Markings	✓	✓
Apron Markings	✓	✓
Runway Lighting	✓	✓
Taxiway Lighting	✓	✓
Apron Markings		



ASSISTANCE FROM ICAO

- ▶ DGCA requested ICAO assistance to conduct a preliminary technical cooperation mission in order to get a better estimate of work involved with the certification of the New Airport.
- ▶ The objective of the mission was to visit the new airport site and undertake a gap analysis against ICAO Annex 14.
- ▶ Ten Recommendations and two proposals were given by the mission.
- ▶ One proposal was also to conduct a Operational Readiness Programme

Onsite Audit (Final)



- ▶ The Government of Sri Lanka also wanted CAA to conduct an assessment to check the Operational Readiness of the of the Airport in all operational areas
- ▶ This assessment included the areas;
 - Aerodromes
 - Aviation Security
 - Aircraft Operations
- ▶ This Assessment was conducted parallel to Final Aerodrome Certification Audit

Operational Readiness Assessment (ORA)



OBJECTIVE

- ▶ To check all required operational installations, Services, Procedures related the areas of Aerodromes, Aviation Security and Aircraft Operations are in place and functioning correctly for the opening of the airport

Audit Schedule

- ▶ In accordance with Aerodrome Certification Regulations in Sri Lanka
 - CAA should notify the auditee the proposed date of the audit at least one month prior to the audit and get the concurrence of the auditee with the proposed dates for the audit
 - At least two weeks prior to the audit the lead auditor should inform the auditee the audit team and the audit schedule
 - 5 Day Audit from 04.03.2013 to 08.03.2013

Onsite Audit and ORA

- ▶ Aerodrome was opened for Domestic Traffic two weeks prior to the On Site Audit and ORA.
- ▶ During this period the aerodrome was operated with full strength of staff as per aerodrome manual
- ▶ All operations such as inspections in different areas were carried out as per the aerodrome manual by Aerodrome Staff
- ▶ After two weeks of operations, 5 day onsite audit and ORA was started.

Audit Team – Aerodrome Certification Audit



Period – 5 Days from 04.03.2013 to 08.03.2013

Audit Team

▶ **Team Leader:**

- Deputy Director/Aerodromes & Navigation Services

▶ **Team members:**

- Aerodrome Inspectors (2)
- Aerodrome Engineer (Design and Standard)
- Air Navigation Services Inspector (1)
- AIS Inspector (1)
- Expert in Aviation Security and Rescue & Fire Fighting (1)

ON SITE AUDIT – AERODROME CERTIFICATION



- ▶ Aerodrome is operating as per the procedures laid down in the Aerodrome Manual
- ▶ Aerodrome Operator has employed qualified and competent staff to operate Aerodrome as per Aerodrome Manual
- ▶ Verify the Aerodrome Data given in the manual

Operational Readiness Assessment Team - Aviation Security



Team Leader

Deputy Director/Aviation Security

Team Members

Aviation Security Inspector

Assistant Aviation Security Inspector

Operational Readiness Assessment – Aviation Security



- ▶ Issuance of Access permit
- ▶ Demarcation of Security Restricted Areas (SRAs)
- ▶ Aerodrome Contingency Arrangements
- ▶ Perimeter Security and Access Control Measures
- ▶ Baggage Security
- ▶ Cargo/Mail Security
- ▶ Handling of Hazardous materials
- ▶ Security Controls on Airside Vehicles/Personnel
- ▶ Aircraft Security (Aircraft Operator)
- ▶ Protection of Sites of for Navigational Aids

Operational Readiness Assessment

Team - Flight Operations



Team Leader

Director/Flight Safety

Team Members:

Senior Flight Operations Inspector

Two Flight Operations Inspectors

Ground Operations Inspector

Cabin Safety Inspector

Air Worthiness Inspectors (2)

Operational Readiness Assessment

– Aircraft Operations



- ▶ Maintenance Facility
- ▶ Operations Support Services
- ▶ Loading and Load Control
- ▶ Fuel Facility
- ▶ Removal of Disable Aircraft
- ▶ Ground Support Equipment Management
- ▶ Passenger/Baggage Handling Operation
- ▶ Aircraft Ground Movement Operation
- ▶ Training & Qualifications of Staff - Operations
- ▶ Station Airside Supervision
- ▶ Aircraft Turnaround Coordination

FINDINGS & OBSERVATIONS OF THE AUDIT



- ▶ Onsite Certification Audit was conducted from 4th to 8th March 2013 (5 Days)
- ▶ There were total of 8 Findings and
- ▶ 16 Observations in different areas as below;

FINDINGS

- ▶ Aerodrome Data and Information to be included in the AM and notified to AIS – 2 Findings
- ▶ Aerodrome Rescue & Fire Fighting – 1 Finding
- ▶ Visual Aids and Aerodrome Electrical System – 2 Findings
- ▶ Aerodrome SMS – 1 Finding
- ▶ Obstacle Control – 1 Finding
- ▶ Low Visibility Operations – 1 Finding

Total - 8

OBSERVATIONS

- ▶ Access to Aerodrome Movement area – 02
 - ▶ Aerodrome Emergency Plan – 02
 - ▶ Aerodrome Rescue & Fire Fighting – 06
 - ▶ Aerodrome Work Safety – 01
 - ▶ Apron Management – 01
 - ▶ Wild Life Hazard Management – 03
 - ▶ Removal of Disable Aircraft – 02
 - ▶ Protection of Radar and Nav. Aids – 01
-
- Total - 18



CORRECTIVE ACTION PLAN

- ▶ AASL respond to Audit findings within 2 weeks.
- ▶ Some Findings rectified.
- ▶ Exemptions granted for findings which require a longer time period for rectification.
- ▶ Based on AASLs Corrective action Plan, Certification Granted.
- ▶ MRIA was opened on 18/03/2013



END

Q & A