Singapore – ICAO Developing Countries Training Programme 2018/2019

Singapore and ICAO jointly established a Developing Countries Training Programme (DCTP) in 2001 which is sponsored by the Singapore Government and administered by the ICAO Technical Cooperation Bureau for specialised training programmes conducted by the Singapore Aviation Academy (SAA). The programme has been awarding fellowships for training at SAA. It was further extended and expanded in 2004, 2007, 2010 and 2013. In 2013, a new Aviation Leaders Scholarship for Diploma in Civil Aviation Management was introduced. In response to overwhelming and continued demand, the fellowship and scholarship programme has been extended for another three years from 2016 to 2019, and expanded to provide 300 fellowships and 10 scholarships. Since 2001, 1,036 fellowships and 14 scholarships have been taken up.

List of Courses offered under Fellowships

Training Programmes	Dates	Closing Dates for Application
Safety Oversight Managers	9 – 26 Jul 2018	21 May 2018
Aviation Security Management Programme	16 – 19 Jul 2018	28 May 2018
Aviation Weather Risk Management	23 – 27 Jul 2018	4 Jun 2018
Safety Oversight of Aviation Meteorological Services	30 Jul – 2 Aug 2018	11 Jun 2018
Emergency Management Workshop	30 Jul – 3 Aug 2018	11 Jun 2018
Future Airports: Transforming Mindsets of Regulators and Airport Operators	13 – 17 Aug 2018	25 Jun 2018
Methodology and Best Practices for Aviation System Block Upgrades (ASBU) Implementation	13 – 17 Aug 2018	25 Jun 2018
Aerodrome Certification	3 – 6 Sep 2018	16 Jul 2018
Future Airports: Technology and Digital Agility for Regulators and Airport Operators	15 – 19 Oct 2018	27 Aug 2018
Air Traffic Management Safety Investigation and Analysis	22 – 26 Oct 2018	3 Sep 2018
Civil Aviation Management Programme	22 Oct – 2 Nov 2018	3 Sep 2018
Procedures and Design Process for PBN Airspace	12 – 23 Nov 2018	24 Sep 2018
Air Disasters: Crisis Planning and Business Continuity Management	19 – 23 Nov 2018	1 Oct 2018
Airport Emergency Service Command Leadership Workshop	3 – 7 Dec 2018	15 Oct 2018
Safety Oversight Inspectors (Flight Operations)	18 Feb – 1 Mar 2019	31 Dec 2018
Safety Audits of Air Traffic Services	25 Feb – 1 Mar 2019	7 Jan 2019

Note: Course dates are subject to change. For the latest dates, please visit SAA's website at www.saa.com.sg.

Terms of Fellowships

The Government of Singapore will bear the training fees, daily allowance of sixty Singapore Dollars (S$60) and hotel accommodation for participants accepted for the programmes. Complimentary breakfast will be provided at the hotel and lunch at SAA during training days. Travel arrangements are to be made and costs borne by the nominating Governments.

Hotel accommodation will be provided for the training duration, i.e. one day before course commencement (after 2 pm) and one day after the course (till 12 noon). Daily allowance will be limited to the training duration, i.e. from the start of the course up to the last day of the course. Expenses to be incurred for stay beyond this duration will not be covered. Participants are advised to secure their own overseas travel insurance to cover themselves for the period of the training in Singapore.

Application Procedures

The fellowships are intended for participants nominated by their respective Governments. Nominating Governments should preferably nominate not more than 2 candidates for each course and indicate which candidate should take priority if more than one candidate is nominated.

Applications should be submitted online at www.saa.com.sg/fellowships by the stated closing dates. Before proceeding with the online application, Nominating Governments should complete and endorse the attached Nomination Form (also available online) as part of the application process.

For enquiries, please contact:

Fellowships Management
Singapore Aviation Academy
Tel: (65) 6540 6232 / 6540 0433
Fax: (65) 6542 9890 / 6543 2778
Email: saa_fellowships@caas.gov.sg

SINGAPORE – ICAO Developing Counties Training Programme
Fellowship/Scholarship Nomination Form

Note: The completed nomination form needs to be submitted as part of the online application.

PART I – NOMINATION (to be completed by direct reporting officer of applicant)

The Government of _____ hereby:
(name of State)

1. Nominates: Mr./Mrs./Ms. _____
(name as in passport, underline surname)

for _____
(course name)

scheduled for _____
(course dates)

2 Agrees that it will assume the responsibility for the nominee's transportation costs to and from Singapore (not applicable for scholarship).

3 Certifies that:

a) the nominee will be in possession of a valid passport having a 6 –month validity period beyond the scheduled termination date of the course requested;
b) all information provided by the nominee is complete and correct; and
c) the nominee has an adequate knowledge of and/or expertise in the training field and English language proficiency allowing him/her to successfully participate in the training course.

Please explain why this applicant has been nominated for this fellowship/scholarship.

Please describe what skills/knowledge you would like the applicant to gain from this course.

PART 2 – ENDORSEMENT (to be completed by Director-General of Civil Aviation Authority)

_____ (Affix Official Seal or Stamp)
Name

_____ _____
Designation (Director-General or equivalent) Name of Organisation

_____ _____ - _____ - _____
Signature Country code Area code Office Tel No.

_____ _____ - _____ - _____.
Email Address Country code Area code Office Fax. No.

SAFETY OVERSIGHT MANAGERS

9 – 26 Jul 2018

This course provides you with an understanding of the fundamental principles contributing to the effective and efficient management of safety oversight activities of a State's aviation regulatory body.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand the role and responsibilities of a safety oversight manager
- Understand the ICAO Standards and Recommended Practices (SARPs) and other national civil aviation regulations relating to safety oversight
- Update your organisation's safety oversight system

WHAT IS COVERED

- Obligations under the Chicago Convention
- ICAO SARPs
- ICAO Organisation Structure
- Expanded ICAO Universal Safety Oversight Audit Programme Processes and Audit Results
- Establishment and Management of the Safety Oversight System
- ICAO Safety Audit Oversight Manuals
- Management of Aircraft Operators
- Selection and Recruitment of Technical Staff for Civil Aviation
- Development of Staff Training and Competence Policy
- Regulatory Framework
- Inspectors' Handbooks
- National Aviation Regulatory Authority Organisation Structure and Roles: Powers and Enforcement
- Quality Systems and Safety Management
- ICAO Aircraft Incident/Accident Investigation Audits
- Management of Aerodrome Safety
- Air Traffic Services Safety Management and Audits
- Civil Aviation Authority of Singapore's Safety Management System
- Designation and Delegation Policy
- Operations and Management of Personnel Licensing
- Management of Cabin Safety Operations
- Legal Principles Underlying Safety Oversight Functions
- Bilateral Agreements and Article 83 *Bis*: Transfer of Responsibility
- Success Factors: Managing Global and Corporate Strategies
- Best Practices in Resource Management
- Strategic Business Planning for Managers
- Management of the Regulator and Industry Interface
- Management of Aircraft Incident/Accident Investigation
- Management of Dangerous Goods
- Understanding and Managing Human Factors in a Regulatory/Operational Aviation Environment

LEARNING ACTIVITIES

- Exercises
- Panel Discussions

WHO SHOULD ATTEND

This course is beneficial to personnel responsible for the safety oversight of aircraft operations and maintenance such as managers and inspectors from civil aviation administrations.

AVIATION SECURITY MANAGEMENT PROGRAMME

16 – 19 Jul 2018

This programme provides you with an understanding of the requirements, principles and practices to effectively implement aviation security (AVSEC) management.

WHAT YOU WILL LEARN

Upon completion of this programme, you will be able to:

- Understand AVSEC management concepts
- Apply best practices for planning and managing AVSEC
- Develop an AVSEC framework in line with ICAO requirements

WHAT IS COVERED

- Understanding AVSEC
  - AVSEC: The big picture
  - ICAO's role and approach to aviation security
  - The State's security oversight obligations
  - Aircraft security
  - Cargo and mail security
  - Threats to critical aviation information and communication technology systems
- Enhancing the Security Manager's Toolkit
  - Training effectiveness
  - Human factors in AVSEC operations
  - Harnessing new technologies, research and development
- Building a Robust AVSEC Framework
  - Regulatory oversight
  - Crisis management and response to acts of unlawful interference
  - Quality control
  - Security management system
- Fostering Effective Partnerships in AVSEC
  - Airport security

WHO SHOULD ATTEND

This programme is beneficial to AVSEC managers and supervisors from civil aviation administrations, airport authorities, air navigation service providers, airlines and AVSEC related agencies.

AVIATION WEATHER RISK MANAGEMENT

23 – 27 Jul 2018

This course is designed to equip you with knowledge and skills to determine how hazards and risks from adverse weather conditions impact flight operations, and ways to manage these risks.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Identify and use various weather and climate products and services to facilitate operational decision-making, flight planning, operational control and air traffic services.
- Put in place practices, processes and procedures to effectively and proactively manage weather-related risks, enhancing operational effectiveness and efficiencies.
- Identify ways to enhance safety and performance, resulting in the reduction of passenger and crew injuries, diversions and aircraft damages due to adverse weather.

WHAT IS COVERED

- Impact of Weather on Aviation Operations
  - Effects and cost of weather to aviation
  - New trends in occurrence causation and weather–related mishaps
- Current Weather Safety Nets
  - Weather information status and aviation weather system
  - ICAO Annex 3; World area forecast system
  - Tropical cyclone warning and volcanic ash advisory centres
  - Safety and quality initiatives
- Weather Decision-making
  - Naturalistic decision-making and plan continuation error
  - Threat/error management and situational awareness
  - Facilitating and improving decisions
- Weather Risk Management Systems
  - Aviation weather hazards and risks
  - Weather risk profile for your operation
  - Weather risk management process, monitoring and review
  - Weather risk control system
  - Procedures for dispatching aircraft and coping with weather
- Climatology and Weather Patterns
  - Weather–related risks
  - Global climatology and weather patterns
  - Regional weather risks and weather risks with station climatology
  - Improving meteorology in route manuals
- Investigation of Weather Occurrences
  - Weather investigations to support safety management systems (SMS) and safety performance
  - Event assessment process and “Weather Package” in data collection
  - Collection of human factors data and analysis of meteorological data
  - ICAO Doc 9756 Part III
- Proactive Forecasting Systems for Supporting Decision–making
  - Effect of weather forecasting on commercial aviation
  - Decision-making in the cockpit, dispatch, tower, etc.
  - Tactical weather decision aids and code grey forecasting system
  - Storm readiness programmes

WHO SHOULD ATTEND

This course is beneficial to personnel who use weather information for operational, investigation and safety purposes from civil aviation administrations, airlines, air navigation service providers, airport authorities, investigation agencies, and meteorology agencies.

SAFETY OVERSIGHT OF AVIATION METEOROLOGICAL SERVICES

30 Jul – 2 Aug 2018

This course provides you with an understanding of a State's safety oversight functions and activities relating to aviation meteorology (MET) in accordance with ICAO's requirements.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand the ICAO standards on safety oversight relating to aviation MET
- Implement Quality Management System (QMS) and competency assessments for aviation MET staff

WHAT IS COVERED

- Overview of the State's Safety Oversight Obligations
  - Critical elements of a safety oversight system
  - ICAO Standards and Recommended Practices
  - State Safety Programme
  - Safety Management System (SMS)
- ICAO Annex 3 and Docs 8896, 9837, 9873
  - MET observations and reports
  - Forecasts
  - Significant Meteorological Information (SIGMET), aerodrome warnings and wind shear alerts and warnings
  - QMS requirements
  - Training, qualification and competency standards requirements
- Working Relationship between ICAO and World Meteorological Organisation
- Safety Oversight of Aviation MET services
  - Empowerment and legal authorities
  - Audit and inspection activities
  - Continuous monitoring
  - Singapore's experience
- Safety Oversight MET Inspectors
  - Roles and responsibilities
  - Qualification and training
  - Skills and personal attributes
  - MET Inspector's handbook

LEARNING ACTIVITIES

- Learning Journey to Meteorological Service Singapore
  - Set-up of MET Watch Office and MET Observation Station
  - Aviation weather services and products, including its role as ICAO designated Operational Meteorological Information (OPMET) gateway
  - Implementation of QMS and SMS

WHO SHOULD ATTEND

This course is beneficial to personnel responsible for the effective regulation and oversight of aviation MET from civil aviation administrations, aviation accident investigation agencies and MET agencies.

EMERGENCY MANAGEMENT WORKSHOP

30 Jul – 3 Aug 2018

This strategic workshop provides you with updates on the latest developments in emergency planning and aircraft incident management.

WHAT YOU WILL LEARN

Upon completion of this workshop, you will be able to:

- Understand and implement ICAO Standards and Recommended Practices (SARPs) relating to emergency preparedness
- Identify risks at airports and recommend appropriate actions to counter and manage such risks
- Develop an incident and emergency management system for your organisation

WHAT IS COVERED

- Emergency Preparedness for Airport Emergency Services (AES)
- Legal Aspects of Disaster and Emergency Management
- Crisis Management at Changi Airport
- ICAO's Requirements for Very Large Capacity Aircraft (VLCA) and its Emergency Management
- Medical Response to Major Incidents at Airports
- Managing Maritime Disaster
- Aircraft Rescue Fire-fighting Management
- Airport Emergency Planning
- Incident and Emergency Management System
- Fire-fighting and Rescue Disaster Handling Experience
- Visit to Changi Airport Fire Station
- Psychological Impact
- Bulk Fuel Fire Management
- Airport Exercise Planning
- Aircraft Accident Investigation

LEARNING ACTIVITIES

- Case Studies

WHO SHOULD ATTEND

This workshop is beneficial to fire officers, emergency service commanders, airport executives and operational supervisors from civil aviation administrations, airport authorities, emergency service providers and airlines.

FUTURE AIRPORTS: TRANSFORMING MINDSETS OF REGULATORS AND AIRPORT OPERATORS

13 – 17 Aug 2018

As leaders in your industry, you have the responsibility to lead and transform your organisation to be agile and proactive in anticipating and adapting to rapidly changing business environments, e.g., changing demographics of worker population and digital disruption.

This programme will provide you with the concepts, methods, frameworks and industry-specific case studies, to diagnose the state of transformation in your organisation, analyse industry trends, identify potential gaps to effect holistic transformation and develop a 'transformation roadmap' unique to your organisation's vision, purpose and strengths.

WHAT YOU WILL LEARN

Upon completion of this programme, you will be able to:

- Gain the big picture of the aviation landscape and the purpose of transformation
- Identify possible gaps in your organisation and industry
- Address difficult issues with creativity and critical thinking
- Apply 'Story', 'Purpose', Environment', 'Capabilities' and 'Leadership' (SPEC'L) framework, to assess the state of transformation in your organisation
- Design interventions around the SPEC'L framework to help your organisation transform systemically, in a structured way.
- Strategising and leading the transformation efforts in your organisation.
- Overcoming challenges specific to your organisation.
- Transforming the development and business process.
- Getting started in your organisations
- Understand 'Purpose' of transformation and how to get there via effective strategy design
- Discover the unique challenges of your organisation and industry and apply creative problem-solving techniques for 'Environment', Capabilities' 'Leadership' and 'Story'
- Sharing by airport operators and regulators on bringing one's airport through a transformation journey

WHAT IS COVERED

- Transforming the Enterprise – Through discussions and exercises, participants learn how to kick start their transformation efforts and bring it up to the next level.

LEARNING ACTIVITIES

- Case Studies
- Discussions and exercises
- Learning journeys to Changi Airport

WHO SHOULD ATTEND

This programme is beneficial to director–level and senior management personnel from civil aviation administrations, airport authorities and relevant government agencies.

METHODOLOGY AND BEST PRACTICES FOR AVIATION SYSTEM BLOCK UPGRADES (ASBU) IMPLEMENTATION

13 – 17 Aug 2018

This course provides you with a common understanding of the Aviation System Block Upgrades (ASBU) methodology and how best to implement the modules. This interactive and practical course will also guide you in making capability–implementation decisions, developing a business case to support investment decisions and communicating the value impact of the ASBU framework.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Describe and apply concepts, framework and requirements of ASBU
- Identify business case elements for ASBU implementation
- Understand the process of how to negotiate with multiple ASBU stakeholders

WHAT IS COVERED

- ASBU Overview and Value: Guidance in Selecting ASBU Capabilities
  - Introduction of the ASBU concept and framework
  - Global aviation challenges
  - Course conceptual model
  - Introduction of course case study and exercise format

- Identifying Operational Performance
  - Decision process to understand need for upgrades
  - Evaluating economic, demographic and market trends
  - Identifying the aviation system's projected demand and expected capacity
  - Needs and Dependency Analysis (NDA) overview: Prerequisites and preparation
  - NDA candidate ASBU modules needs dependencies and needs inventory
  - NDA baseline inventory and gap analysis

- Operational and Business Views of Case Study Alternatives
  - NDA impact analysis
  - Assessing ASBU operational effects using performance indicator
  - Business case analysis
  - Operational benefits
  - Life-cycle costs
  - Aviation service provider financial results
  - Aircraft operator financial results
  - Identifying other social effects: Passengers, safety and environment
  - Summarising social results

LEARNING ACTIVITIES

- Case Studies on Economic Value and Decision-making
  - Economic impact of ASBU investment policy
  - Multi-stakeholder negotiation and timing to realise the 'Best' return on investment
  - Multi-stakeholder role-play exercise

WHO SHOULD ATTEND

This course is beneficial to personnel responsible for ATM modernisation programmes and ASBU capability-implementation from civil aviation administrations, air navigation service providers, airlines, airport authorities, air traffic management (ATM) system manufacturers and solution providers.

AERODROME CERTIFICATION

3 – 6 Sep 2018

This course provides you with an in-depth understanding of aerodrome certification requirements as well as implementation tools.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Explain the objectives of certifying an aerodrome
- Understand the implications in certification
- Elaborate the responsibilities and obligations under the certification regime

WHAT IS COVERED

- Review of ICAO Aerodrome Certification Requirements
  - ICAO Annex 14 (Aerodromes)
  - ICAO Doc 9774 (Manual on Certification of Aerodromes)
- ICAO Annex 14 Standards and Recommended Practices
- ICAO Technical Manuals Relating to Aerodrome Design and Operations
- State Regulatory Set-up and Legislative aspects
- Aerodrome Certification Requirements and Procedures
- Methodology on Preparation of Aerodrome Manuals
- Aerodrome Certification Processes and Surveillance
- Obligations of Regulator and Aerodrome Operator
- Airport Management Structure Sample
- Competence Models for the Various Functional Areas and Corporate Responsibilities
- Understanding and Implementing an Aerodrome Safety Management System (SMS)
- Introduction to Basic Human Factors and Work Place Safety
- Audit and Inspection Methods for Ensuring Compliance
- Reporting of Airport Accidents/Incidents for SMS

LEARNING ACTIVITIES

- Practical Exercises
  - Documentation and implementation of regulatory requirements
  - Aerodrome design and operations
  - Identification of hazards and defences
- Site Visits

WHO SHOULD ATTEND

This course is beneficial to personnel involved in the regulation, design, development and certification of airports from civil aviation administrations and airport authorities.

FUTURE AIRPORTS: TECHNOLOGY AND DIGITAL AGILITY

FOR REGULATORS AND AIRPORT OPERATORS

15 – 19 Oct 2018

This programme will provide you with the concept and application of a transformative mind-set shift and the ability to lead and rally your organisation to become more digital and agile to the needs of your operation and customers. You will be equipped with a sound understanding of agile and digital strategies and techniques to unleash new digital initiatives for developing innovative business strategies. Case studies on application of Digital Strategies would include the use of new technologies, capitalising on digital trends best practices.

WHAT YOU WILL LEARN

Upon completion of this programme, you will be able to:

- Achieve enterprise digital agility
- Set up a digital capability within your organisations
- Strategize and lead digitalisation initiatives
- Set up measures to drive digital success
- Plan development infrastructure to support agile development
- Glean latest technology and digital trends

WHAT IS COVERED

- Digital trends and challenges
- Identifying digitisation opportunities and charting the digital roadmap
- Generating growth through data and analytics
- Bridging the gap between business and IT
- Automating the product/application delivery
- Sharing by airport operators and regulators on the need to stay agile and adapt to disruptions in technology
- Build up the digital capabilities of one's airport

LEARNING ACTIVITIES

- Case Studies
- Discussions and Exercises
- Learning journeys to Changi Airport

WHO SHOULD ATTEND

This programme is beneficial to middle management personnel from civil aviation administrations, airport authorities and relevant government agencies.

AIR TRAFFIC MANAGEMENT SAFETY INVESTIGATION AND ANALYSIS

22 – 26 Oct 2018

This course provides you with guidance on best practices in systemic safety investigation and analysis techniques as applied to air traffic management (ATM). It covers both relevant human factors theories and practices as well as examines key issues relating to safety investigation and analysis in the ATM environment.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand best practices in systemic safety investigation and analysis techniques in ATM
- Identify key issues in safety investigation and analysis in an ATM environment
- Apply witness interviewing skills and techniques

WHAT IS COVERED

- Introduction to ATM Safety Investigation and Analysis
  - Overview
  - ICAO Annex 13 (Aircraft Accident and Incident Investigation)
  - Purpose and objectives
  - Analysis techniques
- Managing Human Error and Just Culture
  - Principles of human error
  - Just Culture
- Organisational Accidents
  - Overview
  - The SHEL Model (Software, Hardware, Environment, Liveware)
  - The Reason Model and Systemic Occurrence Analysis Methods (SOAM)
- Human Performance Limitations
  - Stress and fatigue
  - Threat and error management
  - Information processing
  - Situational awareness
  - Decision-making
- Witness Interviewing Techniques
  - Theory and practice
- SOAM
  - Human involvement
  - Contextual conditions
  - Organisational and system factors
  - Barriers in accident prevention
- Investigative Issues and Reporting Requirements
  - Investigator qualities
  - Human bias
  - Data organisation tools
  - Traps and tips for investigators
- Effective Findings and Recommendations
  - Developing effective findings and recommendations

LEARNING ACTIVITIES

- Interviewing Skills
- Application of SOAM
- Case Studies
  - Practice and consolidation of safety investigation and analysis techniques
  - Syndicate work to further refine safety investigation and analysis techniques

WHO SHOULD ATTEND

This course is beneficial to ATM managers, supervisors, safety managers, investigators, trainers and inspectors from civil aviation administrations, air navigation service providers and military air traffic service providers.

CIVIL AVIATION MANAGEMENT PROGRAMME

22 Oct – 2 Nov 2018

This programme will provide you with a broad overview and perspective of the civil aviation sector, its major elements and their interfaces in an integral eco-system. It will also provide you with a focused examination of each element, their key requisites and the regulatory and operational best practices to meet these requirements and address prevailing and future challenges.

WHAT YOU WILL LEARN

Upon completion of this programme, you will be able to:

- Understand the fundamental principles, and main aspects and factors of civil aviation
- Comprehend each of the major civil aviation elements, their inter- and external linkages, and their essentials
- Glean policies, strategies and methods in meeting the key requirements and dealing with issues

WHAT IS COVERED

- Air Transport/Aviation and Economic Development
  - Economic Development and the Aviation Sector
  - Air Transport Development - Singapore's Experience
  - Air Transport Law and Regulations
  - Airline Strategies
  - Aviation and Human Resource Development
  - International Aviation and Climate Change
  - Public Governance and Policies
- Airport Planning and Management
  - Fundamentals of Airport Planning and Design
  - Airport Management
  - Airport-Airlines Collaboration in Hub Airport
  - Airport-Airlines Partnership – CAG's Experience
  - Airport Commercial Management – CAG's Experience
  - Service Quality Management
- Aviation Safety and Security
  - Safety Oversight and State Safety Programme
  - Safety Oversight of Air Operators and Approved Organisations
  - Safety Oversight of Aerodromes
  - Safety Oversight of Air Navigation Services
  - Safety Management Systems
  - Aviation Security
  - Safety and Security Aspects in Handling Dangerous Goods
  - Human Factors in Aviation
- Air Traffic Management
  - Air Traffic Management
  - Global Air Navigation Plan and Aviation System Block Upgrades
- ATM Initiatives – CAAS' Experiences
- Crisis Management and Emergency/Business Continuity Planning
  - Crisis Management in Aviation
  - Emergency Response to Aircraft Accidents
  - Aircraft Accident Investigation and Management
  - Public Health Management and Aviation
  - Crisis Communications
  - Business Continuity Planning

LEARNING ACTIVITIES

- Visits to Changi Airport, Singapore Air Traffic Control Centre and MITRE Asia Pacific (Singapore)
- Case Studies
- Group Exercise

WHO SHOULD ATTEND

This course is beneficial to middle management personnel from civil aviation administrations, airport authorities, air navigation service providers, airlines, and aviation-related government and private organisations.

PROCEDURES AND DESIGN PROCESS FOR PBN AIRSPACE

12 – 23 Nov 2018

This course provides you with insights of Performance Based Navigation (PBN) concepts and their application for the planning and design of PBN airspace, in accordance with ICAO's Standards and Recommended Practices (SARPs).

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand the principles and concepts of PBN in airspace design
- Recognise the essential elements in the ICAO Global Plan for CNS/ATM systems
- Develop strategies to design various airspace structures

WHAT IS COVERED

- ICAO Global Plan for Communication, Navigation and Surveillance/ Air Traffic Management (CNS/ATM) Systems
- Commercial Air Transport Operations
- General Aviation and Aerial Work Operations
- Test Flights and Unmanned Aerial Vehicles Operations
- Civil Air Traffic Services (ATS) Operations
- Military ATS Operations
- Air Traffic Flow Management (ATFM)
- ATC Separation Criteria
- PBN
- Instrument Approaches Procedures – Conventional and Area Navigation (RNAV)
- Standard Instrument Departures/Arrivals
- (SIDs/STARs)
- Simplified Airspace Organisation
- Flexible Use of Airspace (FUA)
- Airspace Design Planning
- Air Traffic Management Initiatives in Singapore

LEARNING ACTIVITIES

- Design Different Airspace Structures
- Draft Airspace Design Implementation Rules for Different Civil and Military Scenarios.

.

WHO SHOULD ATTEND

This course is beneficial to ATS managers, supervisors, safety managers, airspace planners, trainers and inspectors who are involved in ATS airspace design and procedures from both civil and military ATS providers and regulators, as well as airline flight planning personnel from operational control centres.

AIR DISASTERS: CRISIS PLANNING AND BUSINESS CONTINUITY MANAGEMENT

19 – 23 Nov 2018

This course provides you with the fundamental tools on crisis planning and response after an air disaster and is led by a team of professionals with practical knowledge and experience in crisis planning.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Identify the key response strategies managing air disaster crisis
- Learn the different perspectives of a public and private sector
- Understand and apply the key thrusts of an integrated approach in crisis planning and coordination involving the key stakeholders
- Set up a business continuity plan
- Apply recovery strategies for business continuity

WHAT IS COVERED

- Crisis Planning in Civil Aviation
  - Fundamentals of crisis preparedness and management
  - Aircraft search & rescue (SAR) and rescue coordination centre (RCC) operations
  - Overview of next-of-kin management
  - Overview of crisis communications
  - Overview of aircraft accident investigation
  - Airport crash site management
  - Airport crisis management & emergency operations centre (EOC) operations
  - Crisis management planning
- Business Continuity Management (BCM)
  - Standards and guidelines
  - Understanding the aviation business
  - Business continuity and recovery strategies
  - Business continuity plan development
  - Systematic implementation
  - Crisis communication within BCM
  - Perspectives on BCM from operators
  - Exercise planning, conducting, controlling & after action review

LEARNING ACTIVITES

- Case Studies
- Table-top Exercises
- Learning Journey to Crisis Management Centres and Related Facilities

.

WHO SHOULD ATTEND

This course is beneficial to management, senior executives and operational personnel from civil aviation administrations, airport authorities, airlines, aircraft manufacturers and personnel with responsibilities in crisis management and business continuity planning.

AIRPORT EMERGENCY SERVICE COMMAND LEADERSHIP WORKSHOP

3 – 7 Dec 2018

This course provides you with the knowledge and understanding of the roles and responsibilities of an Executive Fire Officer.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand the roles and responsibilities of an Executive Fire Officer

WHAT IS COVERED

- Executive Leadership – Managing Multiple Roles
- Building Your Business Case
- Public Safety Administration – Planning for Growth
- Assessing Community Risk and Capabilities
- Understanding Airport Emergency Management
- Airport Emergency Planning – Mass Casualties Preparation
- Development of Emergency Planning Exercises

LEARNING ACTIVITIES

- Practical Exercises
- Case Studies

ASSESSMENT AND CERTIFICATION

A certificate of attendance will be issued to participants who achieve at least 80% attendance.

PREREQUISITES

- Have completed airport fire officer training or equivalent
- Be in a supervisory position as Duty Officer/Officer In-charge for at least two years

WHO SHOULD ATTEND

This course is beneficial to senior aircraft rescue and fire-fighting personnel from civil aviation administrations, military airports and airport authorities.

This course is Module 4 of the Senior Airport Fire Officers Course.

SAFETY OVERSIGHT INSPECTORS (FLIGHT OPERATIONS)

18 Feb – 1 Mar 2019

This course provides you with an understanding of the fundamental principles underlying the safety oversight measures relating to flight operations required of a State's aviation regulatory body and their importance.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand the role and responsibilities of a flight operations inspector
- Understand the ICAO Standards and Recommended Practices (SARPs) and other national civil aviation regulations on safety oversight relating to flight operations
- Review and update your organisation's safety oversight mechanisms relating to flight operations

WHAT IS COVERED

- Introduction to Flight Operations
  - Flight operations safety oversight functions and activities
  - ICAO Doc 7300 (Convention on International Civil Aviation)
  - ICAO SARPs and guidance materials
- Role and Responsibilities of a Flight Operations Inspector
  - Code of conduct and statutory powers
  - Qualification and training
  - Compliance and enforcement
  - Flight operation of an aircraft: Monitoring
  - Flight operations occurrence reports: Investigation
  - Flight crew licences: Assessment
- Air Operator Certificate
  - Application: Initial enquiry and pre-assessment by regulatory body
  - Certification procedures: Documentation evaluation, demonstration, inspection and certification phase
  - Ground and flight operations inspection
- Document Evaluation
  - Flight documents and manuals
  - Aircraft flight manuals
  - Operations manual
  - Security programme manual
  - Maintenance control manual
  - Minimum equipment list, configuration deviation list and dispatch authorisation
- Special Operations
  - All-weather operations
  - Extended range twin operations
  - Minimum navigation performance specification
  - Reduced vertical separation minima
  - Required navigation performance
  - Ultra-long range
  - Polar route
- State Responsibilities Regarding Commercial Air Transport Operations by Foreign Operators
  - The right of States to inspect aircraft from other States
  - State approval for a foreign operator to operate within its territory
  - Operator audits by established commercial audit organisations
  - Approval process and continued surveillance

WHO SHOULD ATTEND

This course is beneficial to personnel responsible for the safety oversight of aircraft operations such as flight operations inspectors, safety managers and auditors from civil aviation administrations and airlines.

SAFETY AUDITS OF AIR TRAFFIC SERVICES

25 Feb – 1 Mar 2019

This course provides you with an understanding of international requirements, as well as the principles and skills necessary for the effective planning and conduct of safety audits of air traffic services (ATS).

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Define the role and responsibilities of safety auditors
- Plan and develop safety audit procedures
- Identify deficiencies in the ATS system and implement corrective action plans

WHAT IS COVERED

- Safety Audit Concept
  - Safety management systems in ATS
  - Overview of ICAO
  - Universal Safety Oversight Audit Programme (USOAP)
  - Continuous Monitoring Approach (CMA)
- Safety Audit Planning and Processes
  - Role and responsibilities of safety auditors
  - Procedures for safety audits
  - Planning safety audits
  - Analysing the safety audit process
  - Key findings and classifications of safety audits
  - Safety recommendations and observations
  - Safety audit reports and follow up audits
- Principles for Safety Audits
  - Safety concept models
  - Audit objectives to ascertain compliance with relevant documents
  - Processes and situations which could lead to non-compliance or non-adherence to standards and procedures
  - Implementation of corrective action plans to correct identified deficiencies in the ATS system
- Scope of Safety Audits
  - Auditing of ATS operations manuals
  - Provisions for ATS route structure
  - Application of prescribed separation minima
  - Provisions for visual or radar observation of manoeuvring areas
- Procedures for low visibility aerodrome operations
  - Maintaining traffic volumes and controller workload
  - Procedures for failure or degradation of ATS systems, including communication, navigation and surveillance (CNS)
  - Procedures for incidents reporting and other safety-related occurrences
- Operational and Technical Issues
  - Operational working conditions
  - Display of flight plan, control and coordination data
  - Input and output devices for automation systems
  - CNS and other safety significant systems and equipment
- Licensing and Training Requirements
  - Training and licensing of controllers with valid ratings
  - Maintenance of competency
  - Maintenance of efficient teamwork
  - Implementation of new or amended procedures and updated communications, surveillance and other safety significant systems
  - Maintenance of proficiency in the English language
  - Use of standard phraseologies

WHO SHOULD ATTEND

This course is beneficial to personnel responsible for the planning and conduct of safety audits of ATS such as safety managers and system planners from civil aviation administrations and air navigation service providers.

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