OCCUPATIONAL FRAMEWORK

SECTION H: TRANSPORTATION AND STORAGE

DIVISION 51: AIR TRANSPORT

First Printing 2023

Published in Malaysia by

Department of Skills Development (DSD)
Level 7-8, Block D4, Complex D
Federal Government Administrative Centre
62530 Putrajaya, Malaysia
http:/ / www.dsd.gov.my

Printed by

Golden Global Network (SA0124636-K)
No. 11, Jalan Reko Sentral 2
Taman Reko Sentral, 43000 Kajang, Selangor

Tel: 03-8740 3420 Fax: 03-8739 8249

Perpustakaan Negara Malaysia Cataloguing-in-Publication Data

Occupational Framework

H51 Air Transport

ISBN 978-967-2393-34-4

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ABSTRACT

An Occupational Framework (OF) is the outcome of an Occupational Analysis that identify the competencies within the work scope of an occupational area. It is used to analyse the competency requirement for skilled human resources within a specific industrial sector. The development of the Occupational Structure is a preliminary process in developing the relevant National Occupational Skills Standard (NOSS). The NOSS in turn will be developed to be used as the basis to conduct skills training and certification of competent workforce. This OF is developed for the Air Transportation sector; which is based on the Malaysia Standard Industrial Classification (MSIC) 2008 under Section H: Transportation and Storage; Division 51: Air Transport; Group 511: Passenger Air Transport, and 512: Freight Air Transport. This document is divided into five chapters. The first chapter provides the broad overview of the sector, focusing on its regulated ecosystem that then leads to the statement of problem and the study objectives. It also defines the scope and the significance of the study. Chapter two looks at the industrial's present situation and briefly introduces elements of the Malaysia Skills Certification Ecosystem. It also discusses the industry and market analysis, as well as the government bodies and agencies that supporting the growth of the industry. The third chapter explains the methodology used during the OF development, which employed a qualitative analysis. Four data collection techniques were used including documents reviews, interviews, Focus Group Discussion (FGD) session and non-participatory observations to get in-depth understanding to achieve the deliverables of this OF, namely the Occupational Structure, Occupational Responsibilities and Occupational Descriptions. It also identifies the jobs in demand, critical jobs, competencies in demand, jobs relevant to technology and industrial revolution, and the emerging skills. The final chapters presented the findings of the OF from the qualitative analysis. These findings will in turn be the basis of reference for the development of the NOSS document. The NOSS will serve not only as a reference of skills standards for certification but also as a guide to developing the skills training curriculum. The total number of job areas identified is 5 with 24 job titles. All job titles were identified as relevant to the current technology and industrial revolution and 6 job titles are classified as critical jobs in the Air Transportation sector.

ABSTRAK

Kerangka Pekerjaan (OF) adalah hasil daripada Analisis Pekerjaan yang mengenal pasti kecekapan dalam skop kerja sesuatu bidang pekerjaan. Ia digunakan untuk menganalisis keperluan kecekapan sumber manusia mahir dalam sektor perindustrian tertentu. Pembangunan Struktur Pekerjaan adalah proses awal dalam membangunkan Standard Kemahiran Pekerjaan Kebangsaan (NOSS) yang berkaitan. NOSS pula akan dibangunkan untuk digunakan sebagai asas untuk menjalankan latihan kemahiran dan pensijilan tenaga kerja yang kompeten. OF ini dibangunkan untuk sektor Pengangkutan Udara; yang berdasarkan Klasifikasi Industri Standard Malaysia (MSIC) 2008 di bawah Bahagian H: Pengangkutan dan Penyimpanan; Bahagian 51: Pengangkutan Udara; Kumpulan 511: Pengangkutan Udara Penumpang, dan 512: Pengangkutan Udara Freight. Dokumen ini dibahagikan kepada lima bab. Bab pertama memberikan gambaran luas mengenai sektor ini, dengan memberi tumpuan kepada ekosistem terkawal yang kemudiannya membawa kepada pernyataan masalah dan objektif kajian. Ia juga mentakrifkan skop dan kepentingan kajian. Bab dua melihat keadaan semasa industri dan secara ringkas memperkenalkan elemen Ekosistem Persijilan Kemahiran Malaysia. Ia juga membincangkan analisis industri dan pasaran, serta badan-badan kerajaan dan agensi-agensi yang menyokong pertumbuhan industri. Bab ketiga menerangkan metodologi yang digunakan semasa pembangunan OF, yang menggunakan analisis kualitatif. Empat teknik pengumpulan data telah digunakan termasuk semakan dokumen, temu bual, sesi Bengkel Perbincangan Fokus Berkumpulan (FGD) dan pemerhatian tidak serta untuk mendapatkan pemahaman yang mendalam bagi mencapai objektif OF ini, iaitu Tajuk Pekerjaan, Tanggungjawab Pekerjaan dan Huraian Pekerjaan. Ia juga mengenal pasti bidang pekerjaan yang kritikal dan pekerjaan yang berkaitan dengan teknologi dan revolusi perindustrian serta kemahiran baru. Bab-bab terakhir membentangkan penemuan OF dari analisis kualitatif. Penemuan ini seterusnya akan menjadi asas rujukan untuk pembangunan dokumen NOSS. NOSS akan berfungsi bukan sahaja sebagai rujukan standard kemahiran untuk pensijilan tetapi juga sebagai panduan untuk membangunkan kurikulum latihan kemahiran. Jumlah bidang pekerjaan yang dikenal pasti ialah 5 dengan 24 jawatan. Semua tajuk pekerjaan dikenal pasti relevan dengan teknologi semasa dan revolusi perindustrian dan 6 tajuk pekerjaan diklasifikasikan sebagai pekerjaan kritikal dalam sektor Pengangkutan Udara.

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ABBREVIATIONS

AAIB	Air Accident Investigation Bureau
ACI	Airport Council International
ANSPs	Air Navigation Service Providers
AOC	Air Operator Certificate
ASL	Air Service Licence
ASP	Air Service Permit
ATC	Air Traffic Control
ATP	Authorised Technical Personnel
ATPL	Airline Transport Pilot Licence
ATS	Air Traffic Service
CAA	Civil Aviation Authority
CAAM	Civil Aviation Authority Malaysia
CAD	Civil Aviation Directives
CAGM	Civil Aviation Guidance Materials
CAGR	Compound Annual Growth Rate
CDL	Configuration Differential List
CIQ	Custom, Immigration and Quarantine
CONOPS	Concept of Operations
CPL	Commercial Pilot Licence
CRM	Crew Resource Management
CRS	Computer Reservation System
DCAM	Department of Civil Aviation Malaysia
DKM	Diploma Kemahiran Malaysia/ Malaysian Skills Diploma
DLKM	Diploma Lanjutan Kemahiran Malaysia/ Malaysian Skills Advanced Diploma
DME	Designated Medical Examiners

DOSM	Department of Statistics Malaysia
DSD	Department of Skills Development
EASA	European Union Aviation Safety Agency
EFB	Electronic Flight Bag
ELP	English Language Proficiency
FAA	The Federal Aviation Administration
FCBP	Flight Crew Briefing Package
FGD	Focus Group Discussion
FO	First Officer
FOB	Fuel on Board
FOM	Flight Operation Manager
FTL	Flight Time Limitation
FTO	Flight Training Organizations
GDP	Gross Domestic Product
GDS	Global Distribution System
HRD Corp	Human Resource Development Corporation
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMP3	Third Industrial Master Plan
IOSA	IATA Operational Safety Audit
IR	Instrument Rating
ISIC	International Standard Industrial Classification of All Economic Activities
JUPEM	Jabatan Ukur dan Pemetaan Malaysia
KPI	Key Performance Indicator
LPC	Licence Proficiency Check
MAHB	Malaysia Airport Holdings Berhad
MAIB	Malaysian Aerospace Industry Blueprint
MASCO	Malaysia Standard Classification of Occupations

MAVCOM	Malaysia Aviation Commission
MCAR	Malaysian Civil Aviation Regulation
MCMC	Malaysia Communications and Multimedia Commission
MEL	Minimum Equipment List
MITI	Ministry of International Trade and Industry
MOSQF	Malaysia Occupational Skills Qualification Framework
MROs	Maintenance, Repair and Operations
MSDS	Material Safety Data Sheet
MSIC	Malaysia Standard Industrial Classification
NAICO	National Aerospace Industry Corporation Malaysia
NOSS	National Occupational Skills Standard
NOTAM	Notice to Air Missions
NTP	National Transport Policy
OA	Occupational Analysis
OD	Occupational Description
OF	Occupational Framework
OFP	Operational Flight Plan
OPC	Operator Proficiency Check
OR	Occupational Responsibility
OS	Occupational Structure
OTP	On-Time Performance
PF	Pilot Flying
PIC	Pilot in Command
PM	Pilot Monitoring
PNF	Pilot Not Flying
PTPK	Perbadanan Tabung Pembangunan Kemahiran/ Skills Development Fund
RCOC-B	Remote Pilot Certificate of Competency-BASIC
RPAS	Remotely Piloted Aircraft System

SEP	Safety and Emergency Procedures
SOCSO / PERKESO	Social Security Organisation/ Pertubuhan Keselamatan Sosial
SOP	Standard Operating Procedure
SPKM	Sistem Persijilan Kemahiran Malaysia
TIACA	International Air Cargo Association
UAS	Unmanned Aircraft System
UAV	Unmanned Aircraft Vehicle
UTM	Unmanned Traffic Management
WIM	Written Instructional Materials

GLOSSARY

Competency in Demand	Refers to the ability in performing the tasks efficiently according to the industry requirements.
Emerging Skills	Skills predicted to be imperative to the industry in the near future, based on the recent development, trend or study
Industry 4WRD	It is a financial support facility for Malaysian SMEs in the manufacturing and related services sectors to embrace Industry 4.0
Jobs	Total labour required by establishments to produce goods and services at a given point of time, which is comprised of filled job and vacancies.
Job Demand and Supply	Refer to job vacancy registration and active job seekers.
Job Description	Defined as a summary that provides an overview that explains the type of work and daily tasks performed by a particular position.
Job in Demand	Indicates the job titles that are important in the smooth running of the main operations of the particular sector
Job Title	Defined as the name of a particular job in an organization.
Labour Demand	The labour required by establishments to produce goods and services at a given point in time.
Malaysian Occupational Skills Qualification Framework	Describes and breakdowns an occupational skill into eight competency levels.
Malaysian Skills Certification System	Skill and work-based certification system in Malaysia that is achieved through assessment and training.
Occupation	Defined as a set of jobs whose main tasks and obligations are characterised by a high degree of similarity.

Occupational Framework	Document serves as the foundation for creating occupational standards, particularly in the Employment Activities sector.
Occupational Analysis	Process considers industry requirements as well as studies of relevant occupational structures.
Skills	Defined as the ability to carry out the tasks and duties of a given job.
Vacancies	Unfilled jobs which are ready to be filled. Employers are actively seeking candidates including advertising vacancies, issuing notices and registering with employment agencies as well as conducting interviews to select candidates to fill in the vacancies.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The Occupational Framework (OF) study for Air Transportation begins with this chapter, which provides an overview of the context's history, the problem statement, the objective of the study, its scope, its importance, and the order of the chapters' chronological sequence.

1.2 Research Background

Air transportation division includes the transport of passengers or freight by air or via space and it excludes the overhaul of the aircraft or aircraft engines and support activities such as the operation of the airports. Additionally, operations using aircraft but not for transportation, such as aerial photography, aerial advertising, or crop spraying, are not included in this division. There are two (2) categories listed under air transportation division, the first one is passenger air transport and this category includes air passenger transportation over established routes and according to established schedules. Passenger charter flights, scenic and sightseeing flights, the leasing of air transport equipment with an operator for passenger transportation, and general aviation activities like the transportation of passengers by aero clubs for training or recreation as well as air passenger transportation that is not on schedule. The second category is the freight air transportation which includes transport freight by air over regular routes and on regular schedules, non-scheduled transport of freight by air and launching of satellites and space vehicles as well as space transport.

Transporting people, mail, or freight for hire or reward by air between any two (2) or more sites, of which one (1) is inside Malaysia's boundaries, requires an Air Service License (ASL). This does not apply to anybody who has been granted permission by the Malaysian government to operate a scheduled flight to or from Malaysia, such as international airlines authorised to fly into Malaysia under Air Service Agreements. Every

licence has particular, legally binding restrictions on the services that the licensee is allowed to provide, the license's duration, and other restrictions to which the license is subject. Only trips having a set schedule, such timed commercial flights, are subject to an ASL. The Air Service Permit (ASP) is the right license to request for unplanned trips.

Before the above licenses were obtained from Malaysia Aviation Commission (MAVCOM), any party interested to operate an air carrier company transporting people, mail, or freight for hire or reward by air must obtain the Air Operating Certificate (AOC) from Civil Aviation Authority of Malaysia (CAAM). The Ministry of Transport's Aviation Division is in charge of managing all aspects of civil aviation in Malaysia, including policy development, infrastructure licensing, safety and security, and promotion of laws and regulations. The following are the major regulatory organisations that operate under the Ministry of Transport's authority concerning the air transportation industry.

1.2.1 Civil Aviation Authority of Malaysia (CAAM)

Previously known as Department of Civil Aviation (DCAM) and was formed in 1969 under The Ministry of Transport and responsible as the major technical regulator in charge of overseeing Malaysian civil aviation's safety, maintenance, and security as well as its enforcement.

1.2.2 Malaysia Aviation Commission (MAVCOM)

The Malaysian Aviation Commission (MAVCOM) was formally constituted on March 1, 2016, in accordance with the Malaysian Aviation Commission Act 2015 (Act 771), as a separate organisation to control economic and commercial issues pertaining to Malaysian civil aviation. The objective of the agency is to encourage the development of a civil aviation sector that is robust, focused on the needs of the customer, and financially successful.

1.2.3 Air Accident Investigation Bureau (AAIB)

All independent safety investigations into aviation accidents and incidents involving both Malaysian- and foreign-registered civil aircraft are the responsibility of the AAIB. In accordance with the International Civil Aviation Organization (ICAO) Convention, the AAIB also takes part in international investigations into aviation accidents and incidents

involving aircraft having a Malaysian civil registration. Through continuing research and development initiatives, the AAIB also performs the duties of air accident prevention.

Beside the above regulatory bodies, for most of the international air carrier companies around the world, they have the option to subscribe to the trade association relating to the particular business and industry. Below are some notable trade associations for the aviation industry.

a) The International Air Transport Association (IATA)
This is the trade association of the world's airlines that representing 290 airlines or 83% of total air traffic. The main function of IATA is to support many areas of aviation activity and will assist in developing industry policy on critical aviation issues.

b) International Air Cargo Association (TIACA)
This is a trade association that represents the interests of the air cargo industry, providing support in areas such as safety, security, and environmental sustainability.

c) Airports Council International (ACI)
This is a trade association that represents the interests of airports around the world. ACI provides support and services to its members, such as airport management and operations, safety and security standards, and environmental sustainability.

As of April 2023, there are 214 foreign and 27 local air operators in Malaysia that registered with CAAM as quoted from CAAM website. These includes scheduled and non-scheduled fixed-wing aircrafts, helicopters and hot air balloon. A total of 106,000 employees from all ranks, job scopes and areas are employed by this particular industry in 2017 as reported by IATA. This illustrates the significance of this industry in the labour market and how a sound occupational framework, like this one, would increase the sector's efficiency. The occupational structure is formed based on activities and job titles particular to the industry, which correspond to competency levels in line with the complexity, expertise, and autonomy of the activity. The information in the OF document will also act as a guide for industry participants in identifying vacant positions within this occupational sector in order to create the proper organisational chart in their respective businesses as well as the primary reference for developing National Occupational Skills Standard

(NOSS). And this research will focus in developing the OF solely for Division 51 (Air Transport) under Sector H (Transportation and Storage).

1.3 Problem Statement

In Malaysia, a detailed document on a particular Occupational Structure (OS) that outlines tier-based job sectors and job titles within an industry is known as an Occupational Framework (OF). Besides depicting the job titles, it also describes the occupational responsibilities and the competency set required within the specific industry.

Under MSIC 2008, Section H: Transportation and Storage, Division 51 is focusing on Air Transportation. This division is consisting of two (2) groups, firstly Group 511 – Passenger Air Transport and secondly Group 512 – Freight Air Transport. Although the Civil Aviation Authority Malaysia (CAAM) strictly regulates this sector and provides all legislations in operating an aviation business, due to the intense competition, airlines companies must always be on the verge of a competitive advantage. As compared to the early days when there was virtually no competition, the sector now is tremendously competitive with the born of low-cost carriers, diluting the domestic market and creates the battle for competent talents. Additionally, the existence of mega carriers from the Middle East such as Emirates, Etihad and Qatar, the industry witnesses the competition not only for the international travelling's market share but also in terms of talent mainly the technical staff such as pilots and engineers who were also lured to them because of the better salary (The Sun, 2021).

As a result, the industry requires a distinct framework that elucidates work activities, competency expectations, and also serves as a career pathway to attract talent. Furthermore, the current trend in labour demand and supply, which necessitates the identification of critical jobs, necessary competencies, and jobs related to the industrial revolution and technological advancements, may have an impact on the industry's occupational landscape. Therefore, more research is required to look into the entire Occupational Structure of Air Transport and career options in the form of OF.

On the other perspective, due to the variety of the task, each job necessitates a unique set of skills. Managing and determining what is required to do the job would be difficult. As a result, the OF defines the work scope of a job title within an occupation area in terms of the competencies required and in-demand within the sector. The competencies identified in OF, on the other hand,

do not specify the level of competencies. It will be examined in the National Occupational Skills Standards (NOSS), a document that focuses on specific labour abilities and is developed following the OF. Hence, the creation of this OF is critical because it will be used as the primary reference for updating existing NOSS and creating new NOSS. This further emphasizes the requirement for investigation into the sector of Air Transport's Occupational Framework.

The main benefit in developing this framework is that, it will lead to the development of a clearer occupational pathway for the involved employees especially the pilots and the cabin crews. As it is now, there is no standard and documented guide that outlining the nature of the job, potential career progression and competency requirement to perform the job. Certain company may have different career pathway for their employees based on their individual organisation and business needs. As a result of properly documented occupational framework, the industry players may refer to this document in developing their own organisational chart and to shape the career progression for the employees. Furthermore, this document would also assist the potential job seeker to understand the occupational landscape of this particular sector even before they actually even employed.

1.4 Objective of Study

The objectives of the study are as below:

a) To establish Occupational Structure (OS) that define job areas, job titles, and relevant competency level for the Air Transport sector based on MSIC 2008;

b) To establish Occupational Responsibilities (OR) that outline the main work activities and tasks for each job titles;

c) To establish Occupational Descriptions (OD) for each job title in demand based on the proposed OS for the Air Transport sector;

d) To identify the critical jobs titles in the Air Transport sector;

e) To identify the competency in demand in the Air Transport sector; and

f) To propose job titles related to the industrial revolution as well as the emerging skills for the Air Transport sector.

The study must achieve the aforementioned goals in order to retain its applicability and value. Multiple data gathering technique was employed, which involves document review, face-to-face interview, focus group discussion, as well non-participatory observations, to assure objectivity and reliability. The industry expert panel, which is made up of members from various industry players and pertinent agencies, provides the majority of the input.

1.5 Scope of Study

According to the economic activities listed in the MSIC 2008 document, specifically the Air Transportation sector under Division H51, the study's scope refers to the identification of occupational areas, job titles, competencies levels for each job title, critical jobs, occupational responsibilities, and occupational descriptions. In order to determine newly developing talents that will be formed by the country's industrial revolution's future course, this research also takes into account the nation's existing technological and industrial revolution. The scope of this study is strictly meant for commercial air transport. The military air transport will be covered under a different study in accordance to MSIC 2008.

1.6 Significance of Study

A broad framework of the occupational scope and important job areas and job titles within this sector is provided by the development of an occupational framework (OF) for this sector, specifically for the H51 section, in response to the growing demand and expanding job market for Air Transport sector in Malaysia. The framework encapsulates the collective wisdom of a representative group of industry players as the subject matter experts regarding the key job functions and competencies that a person would need to demonstrate in order to be successful in a particular occupation. OF should be viewed as a guide to organizations especially the airlines in constructing their organizational chart, developing the individual job descriptions and charting the employees career path. Organizations has the option either to adopt the frameworks or to modify them to match their own circumstances. In this line of thought, OF would provide the insight in terms of career option to the job seekers.

Additionally, this OF will be the reference in developing the National Occupational Skills Standard (NOSS) and it will also enrich the Malaysia Standard Classification of Occupations

(MASCO 2020). Finally, it would also benefit the training organizations to develop the curriculum in accordance with the requirement and competencies required for the occupation.

1.7 Structure of Chapters

This chapter concludes with a brief overview of the overall study which includes:

a) Chapter I: Introduction

Presents the research background, problem statement, research objectives, research scope, and the significance of the investigation in order to justify the study.

b) Chapter II: Literature Review

Highlights the ecology of the Malaysian Skills Certification System (MSCS) before describing the MSIC 2008 and Malaysian Occupational Skills Qualification Framework (MOSQF). Following a discussion of the current state of the industry, a business comparison of the sector with a few other nations is made. There is a brief introduction to the components of technology and the industrial revolution. Additionally, it looks at the major stakeholders, such as governing authorities and industry associations that are related to the aviation industry.

c) Chapter III: Methodology

Explains the research approach and design deployed for gathering and analysing data towards achieving the objectives of the study.

d) Chapter IV: Findings

Analyses the findings of the research methods used in Chapter 3 that are in line with the Chapter 1 study objectives.

e) Chapter V: Discussion, Recommendations and Conclusion

Concludes the overall research findings and provides recommendations that include the input from the industry experts. The chapter hence wraps up the study on the Occupational Framework for the Air Transport sector.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter looks at the present situation of Air Transport as well as other critical topics related to this industry that should be covered in this document. The discussion started off with a brief introduction of the National Skills Development Act of 2006 (Act 652), which calls for the development of the Malaysian Skills Certification System / Sistem Persijilan Kemahiran Malaysia (MSCS/ SPKM), an ecosystem of which the Occupational Framework (OF) is a component. The background of OF will then be explored in more depth, along with its components and significance. The MSIC 2008 follows, which establishes the framework for the scope of this OF. Before going further with the National Occupational Skill Standard (NOSS) and discussing its applicability to the present OF of Air Transport, the topic then turned to the establishment of the MOSQF descriptions for Malaysia. The chapter continues with an analysis of the market, a look at the industry, and a comparison of Malaysia with a few other nations. It is also examined how technology, the industrial revolution, and occupation are related.

2.2 National Skills Development Act 2006 (Act 652)

The National Skills Development Act (Act 652) was officially gazette on 29th June 2006 to function as an Act to promote, through skills training, the development and improvement of a person's abilities, which are needed for vocation; and to provide for other matters connected therewith. To put it another way, the Act serves as national legislation for initiating, creating, and implementing Malaysia's standards for skill and training development. In contrast, this Act encourages the adoption of MSCS, where the Department of Skills Development (DSD) is the only organisation tasked with initiating, managing, and overseeing all processes and procedures put in place under MSCS.

Under the MSCS, there are six processes in place to serve a common goal in contributing to the development of trained labour skills in Malaysia. The system includes the skills needs as driven and required by the industries, development of four public documents which are 1. Occupational Framework (OF), 2. National Occupational Skills Standard (NOSS), 3. Written Instruction Materials (WIM), 4. Questions and Assessments, and followed by 5. implementation of the training at industries and training institutes and finally, 6. Reviewing the industry needs. Please refer to the following Figure 2.1, for the complete cycle of the MSCS discussed.

Figure 2.1: Cycle of Malaysia Skills Certification Ecosystem

Source: Department of Skills Development

2.2.1 Occupational Framework

The Occupational Framework (OF), a document that describes an occupational framework for a particular sector in Malaysia, lists both the potential job titles within each occupation area as well as the occupational areas themselves. It was developed for the first time in 2016 and includes a variety of industries where there is supply and demand from small, medium, and big firms. Prior to this, OF was known as Occupational Analysis (OA) based on the DSD's Third Industrial Master

Plan for Malaysia from 2005 to 2016 (IMP3). Studies of pertinent occupational structures and industry needs are taken into account during the OA process. However, a more thorough document with specified parts is needed, which has an impact on the OF, as a result of the Department of Statistics' (DOSM) change on industrial code entities.

Occupational Structure (OS), Occupational Responsibilities (OR), and Occupational Descriptions (OD) are the components of the OF. The term "occupational structure" refers to the overall distribution of jobs within an organisation that are categorised by skill level, economic purpose, or social standing. It provides examples of a certain profession's career trajectories and occupational sectors. The OR, on the other hand, is a well-organised and accurate description of the duties of a job title. OD provides the synopsis of the primary responsibilities and depicts the job general and functional competency. In differentiating between a job and an occupation, a person's performance of a set of obligations and tasks within a particular environment is referred to as a job while the latter is defined as a group of jobs with a significant degree of resemblance in their primary responsibilities and tasks (MASCO, 2020). Therefore, compared to a job, an occupation indicates a deeper understanding.

A carefully thought-out, accurate, and exact OF will be a trustworthy source of information to industry players in developing career pathway in their organization. Along with the OS, OR, and OD, other considerations for OF development includes:

a. **Job in demand** indicates the job titles that are important in the smooth running of the main operations of the Air Transportation sector.

b. **Critical job** is defined as jobs which are in high demand in their respective industries and difficult to fill due to a variety of factors, such as a lack of supply or a need for workers with a specific level of skill in order to perform the tasks. Legislative requirements, international trade, the introduction of new procedures, and expanding technology are some of the causes cited as contributing to this scarcity.

c. **Competency in demand** refers to the capacity to carry out duties effectively in accordance with industry standards. It also includes behavioral characteristics like attitude and knowledge that were necessary for the company or industry.

d. **Jobs related to adoption of technology and the industrial revolution**

e. **Emerging Skills** are those that, according to a recent development, trend, or research, are expected to be crucial to the sector in the near future. The industrial revolution and the quickening pace of technological advancement are typically linked to the emerging skills.

In order to meet the needs of the industry and to advance OF, it is vital to recognize these five (5) pertinent elements of occupations.

Typically, a few documents are utilised to guide the process of developing the OF. An OF is assigned a classification based on the MSIC 2008 published by DOSM. The document, which strives to rebuild the industry sector to be in line with the overall national and international norms, is a controlled field classification. When the National Occupational Skills Standard (NOSS) for relevant industries is developed, the publicly available OF report will be one of the references. The MSIC 2008 and related details in the Air Transport industry are described in the next section. In conclusion, OF fulfils Malaysia's labour market demands by offering, when appropriate, a bird's-eye view of the work scope of certain occupational sectors from a larger-scale viewpoint.

2.2.2 National Occupational Skills Standard

The National Occupational Skills Standard (NOSS) is a document that specifies the competencies expected of an employee working in Malaysia at a specific level of employment, as well as the method to acquiring the skill. NOSS has been gazettes under Part IV of the National Skills Development Act 652. NOSS is created by a group of industry practitioners and experts who work to meet the requirements of the industry. It functions as the primary reference in the Malaysia Skills Certification System's implementation (MSCS). Consequently, the performance of industry workers and apprentices will be assessed based on NOSS prior to the conferment MSCS's requirement and NOSS Relevant to MSIC 2008 Section H, Division 51. As of to this date, there are six (6) National Occupational Skills Standards (NOSS) developed by the Department of Skills

Development (DSD) that associated with the MSIC 2008 Section H, Division 51 Air Transport (see Table 2.1) available for references.

Table 2. 1: NOSS relevant to MSIC 2008 Section H, Division 51, Air Transport

MSIC Group	MSIC Group Corresponding NOSS	
	H522-004-5:2017	In-flight Safety and Hospitality Management (21-08-2017)
	H522-004-4:2017	In-flight Safety and Hospitality Coordination (21-08-2017)
	H512-001-3:2019	Drone Mission Commanding (30-01-2019)
	TP-077-3:2013	In-flight Services (30-12-2013)
	H512-001-2:2019	Drone Piloting (30-01-2019)

The aforementioned NOSS will be reviewed following the completion of the Air Transport OF. This is necessary because the Occupational Structure that depicts job areas and job titles relevant to Air Transport sector is comprehensive. Hence, job titles in the OF that are not currently covered by the NOSS will need to be developed.

2.2.3 Written Instructional Materials (WIM)

Written Instructional Materials (WIM) is a document created by an instructor to guide the delivery of training to trainees. WIM is the primary learning material in the teaching and learning process.

It is also responsible for ensuring that the Learning Outcome (LO) of the Competency Unit (CU) established in NOSS is met. WIM is classified into two (2) categories; 1) Teaching material and 2) Learning material.

2.2.4 Development of Evaluation Questions

Developing evaluation questions for a certification ecosystem requires a careful consideration of the goals, objectives, and outcomes of each certification programs. These questions can be used to evaluate different aspects of a certification system and provide insights into its effectiveness, efficiency, and impact. The evaluation can be conducted using various methods, such as surveys, interviews, focus groups, and performance analysis. The results of the evaluation can be used to improve the certification program and ensure its relevance and value to the industry and society.

2.2.5 Implementation at Institute / Training Centre

The subsequent step is to implement the development program developed through the above processes at the institutes or training centre. This is the process where the selection of the right trainer, the coordination of the programs and the delivery of the programs take place. The implementation of the program must be done in an effective way and needs to be evaluated to ensure that the set objectives of the program conducted are achievable.

2.2.6 Industrial Need

The final step is industrial need. By addressing these industrial needs in the skills development ecosystem, companies can ensure that their employees have the skills they need to succeed in their roles and drive growth and innovation in the industry.

2.3 Malaysian Standard Industrial Classification (MSIC)

A taxonomy of all Malaysian economic activity is provided by the MSIC 2008. The International Standard Industrial Classification of All Economic Activities (ISIC) Revision 4 is adapted, with the necessary modifications made to match the national standard, in this document. The ISIC Revision 3 referenced in the MSIC 2000 has been replaced by the MSIC 2008, which was released by the United Nations Statistics Division. Additionally, the main objective of MSIC is to compile a list of activities according to categories. Together, they may be utilised to generate statistics-

based reports on pertinent economic activity. Then, depending on predetermined resemblance criteria, groups of units with universal primary activities are used to form the industries.

2.3.1 MSIC Overview

The MSIC 2008 is divided into tiers that reflect each individual sector. The categories mentioned are shown in Table 2.2 below.

Table 2.2: Categories based on MSIC 2008

Category	Codes
Section	A
Division	01
Group	011
Class	0111
Item	01111

A "Section" often designates the industry by a single alphabetical letter. The word "Division" will be followed by a two-digit code, and a Section may contain more than one Division. The "Group," which has a three-digit number and is further divided into the "Class" (a four-digit code) and the "Item," reflects more specific groupings (five-digit). Table 2.3 below shows the overall structure of the categorization based on MSIC 2008 in Malaysia.

Table 2.3: Summary Framework of MSIC 2008 in Malaysia

Category	Total
Sections	21
Divisions	88
Groups	238
Classes	423
Items	1,174

2.3.2 Scope of Occupational Framework Based on MSIC 2008 – Air Transport

The scope of the Air Transport is categorised under Section H according to the MSIC 2008 classification. Division, H51 - Air Transport, involves two (2) major groups of activities fall within Division 51, and each of these groups can be further subdivided into a total of two (2) classes ie: 511 and 512. Table 2.4 below, presents the summary of scope based on the hierarchy of section, division, and groups.

Table 2. 4: Summary of Scope Based on MSIC Section, Division and Group

Category	Code	Description
Section	H	Transportation and Storage
Division	51	Air Transport
Group	511	Passenger Air Transport
	512	Freight Air Transport

Source: MSIC 2008

Meanwhile, Table 2.5 describes the scope further based on the respective section, division, group, class, and item.

Table 2. 5: Description of Scope Based on MSIC Section, Division, Group, Class and Item

Category	Code	Description
SECTION	**H**	**Transportation and Storage**
DIVISION	**51**	**Air Transport**
GROUP	**511**	**Passenger Air Transport**
Class	5110	Passenger Air Transport
Item	51101	Transport of passengers by air over regular routes and on regular schedules
	51102	Non-scheduled transport of passenger by air that includes: (a) Charter flights for passengers (e.g., helicopter, etc.) (b) Scenic and sightseeing flights (c) General aviation activities (e.g., transport of passenger by aero clubs for instruction or pleasure).

Category	Code	Description
	51103	Renting of air-transport equipment with operator for the purpose of passenger transportation
GROUP	**512**	**Freight Air Transport**
Class	5120	Freight Air Transport
Item	51201	Transport freight by air over regular routes and on regular schedules
	51202	Non-scheduled transport of freight by air which includes: (a) launching of satellites and space vehicles (b) space transport
	51203	Renting of air-transport equipment with operator for the purpose of freight transportation

Source: MSIC 2008

2.4 Malaysia Occupational Skills Qualification Framework (MOSQF)

An Occupational Skill is broken down into eight (8) competency levels by MOSQF. As shown in Table 2.6 below, each competency level correlates to a distinct amount of complexity, expertise, and autonomy needed to demonstrate the competence in line with that level's knowledge, experience, and adaptability in application.

Table 2.6: Malaysia Occupational Skills Qualification Framework (MOSQF) Chart

Level	Level Descriptors
8	Achievement at this level reflects the ability to develop original understanding and extend a sub-area of knowledge or professional practice. It reflects the ability to address problematic situations that involve many complexes, interacting factors through initiating, designing and undertaking research, development or strategic activities. It involves the exercise of broad autonomy, judgement and leadership in sharing responsibility for the development of a field of work or knowledge, or for creating substantial professional or organisational change. It also reflects a critical understanding of relevant theoretical and methodological perspectives and how

Level	Level Descriptors
	they affect the field of knowledge or work.
7	Achievement at this level reflects the ability to reformulate and use relevant understanding, methodologies and approaches to address problematic situations that involve many interacting factors. It includes taking responsibility for planning and developing courses of action that initiate or underpin substantial change or development, as well as exercising broad autonomy and judgment. It also reflects an understanding of theoretical and relevant methodological perspectives, and how they affect their sub-area of study or work.
6	Achievement at this level reflects the ability to refine and use relevant understanding, methods and skills to address complex problems that have limited definition. It includes taking responsibility for planning and developing courses of action that are able to underpin substantial change or development, as well as exercising broad autonomy and judgment. It also reflects an understanding of different perspectives, approaches or schools of thought and the theories that underpin them.
5	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to address broadly-defined, complex problems. It includes taking responsibility for planning and developing courses of action as well as exercising autonomy and judgment within broad parameters. It also reflects the understanding of different perspectives, approaches or schools of thought and the reasoning behind them.
4	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to address problems that are well defined but complex and non-routine. It includes taking responsibility for overall courses of action as well as exercising autonomy and judgment within fairly broad parameters. It also reflects the understanding of different perspectives or approaches within a sub-area of study or work.

Level	Level Descriptors
3	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to complete tasks and address problems that are well defined with a measure of complexity. It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgments within limited parameters. It also reflects awareness of different perspectives or approaches within a sub-area of study or work.
2	Achievement at this level reflects the ability to select and use relevant knowledge, ideas, skills and procedures to complete well-defined tasks and address straightforward problems. It includes taking responsibility for completing tasks and procedures and exercising autonomy and judgment subject to overall direction or guidance.
1	Achievement at this level reflects the ability to use relevant knowledge, skills and procedures to complete routine and predictable tasks that include responsibility for completing tasks and procedures subject to direction or guidance.

2.5 Industry and Market Analysis

2.5.1 The Value Chain Within the Air Transport Industry

The air transport value chain or aviation supply chain is made up of several interconnected segments. As shown in Figure 2.2, it can be broadly divided into upstream (manufacturers, infrastructure and service providers) and downstream (distribution for freight and passenger) segments, with civil aviation entity such as air freight and air passenger serving as the central node in the aviation value and supply chain. The aviation supply chain has a high level of vertical disintegration. Airlines are the most critical segment to the whole air transportation value chain. Airlines are the starting point, driver, and enabler of this whole economic cycle.

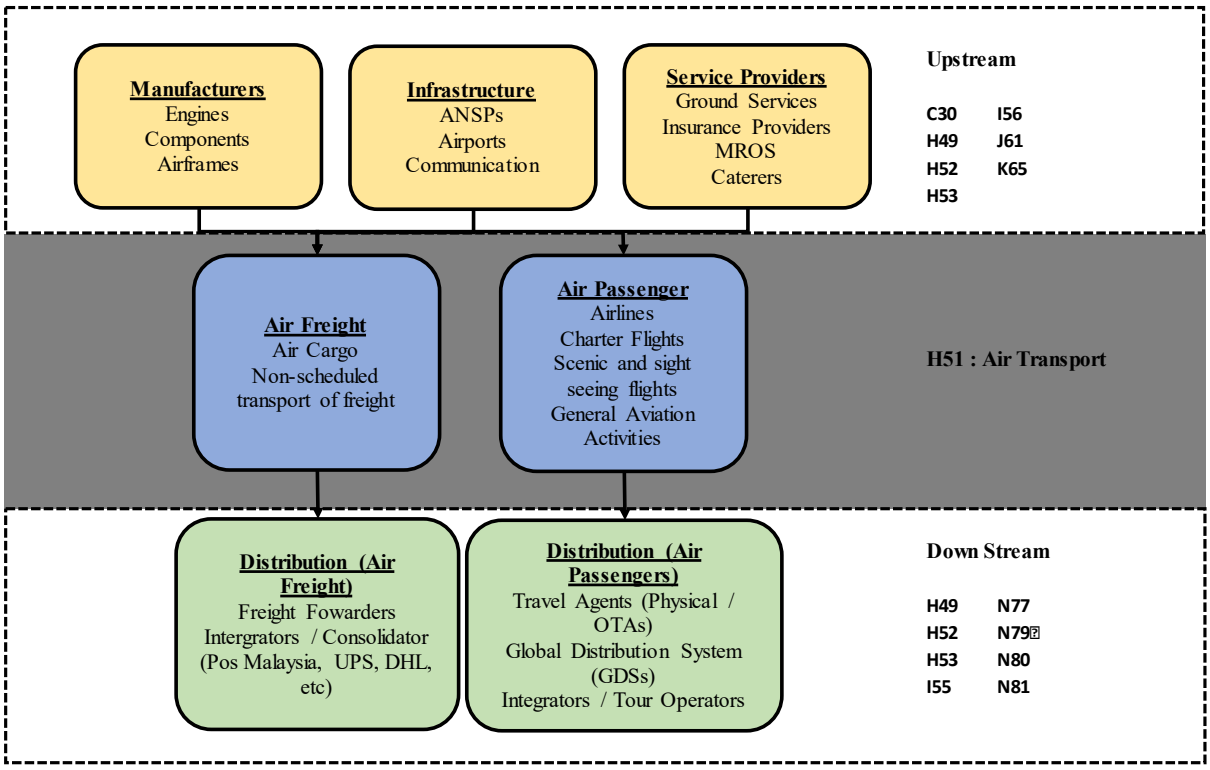

Figure 2.2: Air Transport Value Chain
(Source: Adopted and modified from Tretheway & Markhvida, 2013)

In general, airlines have little or no ownership interest in other value-chain sectors. However, some airlines have gradually divested ownership interests in various sectors of the aviation value chain as a result of changes in national laws, regulatory interventions, or decisions to improve business competitiveness and financial performance. For example, airlines divestiture of assets in aircraft manufacturers, computer reservation systems (CRSs), maintenance, repair and operations (MROs), or made investments in certain supply chain partners, such as providers of fuel, ground handling services, in-airport customer service, catering, and other services. Another sector where investment by airlines can be observed is cargo terminal facilities, cargo handling operations or trucking operations related to pick up and delivery of air cargo. In some markets, airlines have also invested in airport terminals, although this is a more recent trend.

Nonetheless, despite the current high degree of vertical disintegration, it is important to note that the aviation value chain is not a collection of firms that operate independently of one another. The creation of standards and operating procedures has been greatly facilitated across the

value chain members, lowering industry costs and increasing customer service levels. The International Civil Aviation Organization (ICAO) and certain national air safety regulators have established standards and recommended regulations that, for example, facilitate and standardize airport design so that air carriers can operate aircraft to a wide range of similarly regulated, equipped and operated facilities.

2.5.2 Air Transport Industry Outlook

Understanding current industry dynamics in connection to market requirements demands an understanding of industry and market dynamics. This knowledge is critical in formulating industry growth plans, such as workforce requirements, workforce development, training requirements, and market participants' business decisions. To give insight, this section evaluates the Air Transportation sector's importance and the impact to the country's economy. There are various methods for calculating the economic impact of air transportation. One of the prevalent ways is to examine three factors: the jobs and expenditure generated by national airlines and their supply chains, the flows of trade, tourism, and investment generated by users among all airlines serving the country, and the city untoward connections that enable this circulation. All offer a unique but insightful standpoint on the significance of air transport.

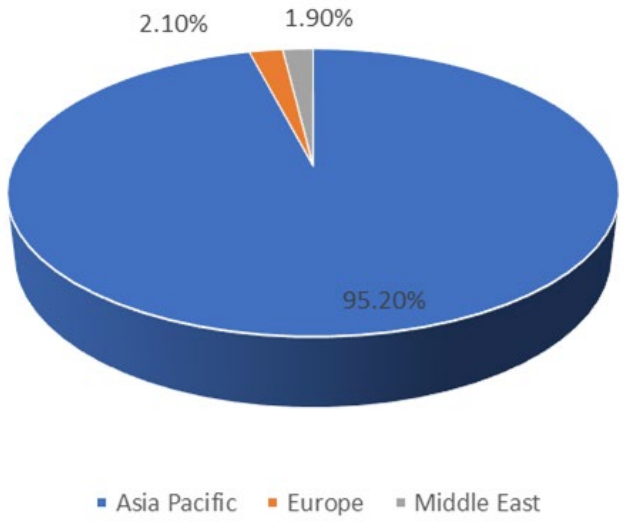

Figure 2.3: Annual Passenger Flows by Region

(*Source*: International Air Transport Association - IATA Annual Review 2017)

Based on 2017 report by International Air Transport Association (IATA), Malaysia Air Transportation industry created around 106,000 direct jobs opportunity. But with the recent Covid 19 pandemic, ICAO economic analysis of Covid 19 on civil aviation, reported that for the year 2020, global passenger traffic has taken a plunge for approximately by 60% as compared to before the pandemic. Malaysia has not been spared as well as it was reported that there was significant reduction of 64% in demand of air transport operation in 2020. Passenger traffic remains low, with only 3 million passengers in the first 6 months of 2021, down from 9 million per month in 2019. Total passenger traffic decreased by 85% in the first half of 2021 compared to the first half of 2020. Nonetheless, in the first half of 2021, cargo volume increased by 8% (864,100 metric tonnes) over the same period in 2020. (794,300 metric tonnes). Despite the COVID-19 pandemic, Malaysia's main cargo players are expanding their routes because they see better commercial opportunities. This is greatly assisted by rising demand for medical equipment and personal protective gear as well as the expansion of the e-commerce sector. Figure 2.3 below depicts the annual passenger flows by region to and from Malaysia

The above diagram depicts the annual passenger flows by region to and from Malaysia as reported by IATA shows that 95.2% or about 41 million passengers arrived to Malaysia from Asia-Pacific. About 2.1% or 925,000 arrived from Europe and 1.9% or 822,00 from Middle East. This is the data as recorded by IATA in 2017. Air transport industry contributes significantly to the national economy by connecting the country to global markets. It has facilitated trade, increased export markets, generated tourism, and is an important enabler of business and commerce. The air transport industry, including airlines and their supply chains, is estimated to contribute USD5.2 billion to Malaysia's GDP. Foreign tourist spending contributes another USD5.1 billion to the country's GDP, bringing the total to USD10.3 billion. In total, inputs to the air transport sector and foreign tourists arriving by air support 3.5 percent of the country's GDP. In total, the industry provides about 450,000 job opportunities directly and indirectly. Besides the passenger air transport, the freight air transport market was also valued at USD37.6 billion in 2020 and is expected to exceed USD55 billion by 2026, with the new economy playing a significant role. E-commerce has proven to be a huge benefit to air cargo growth in recent years, as it is the biggest single catalytic driver. All these are evidences of the importance of the air transport sector towards the nation’s economy.

2.6 Air Transport Business Comparison Between Malaysia and Selected Countries

The global air transport market increased at a compound annual growth rate (CAGR) of 9.7% from USD653.05 billion in 2021 to USD716.16 billion in 2022 as reported in. The Russia-Ukraine war, at least in the short term, hampered global economic recovery from the COVID-19 pandemic. The conflict between these two countries has resulted in economic sanctions against a number of countries, a surge in commodity prices, and supply chain disruptions that have impacted many markets around the world. The air transport market is expected to grow at a CAGR of 12.8% to USD1,158.9 billion in 2026. This figure indicates the extant of the global air transport market which includes passenger air transport and air freight transport scheduled and non-scheduled.

This section will provide an overview of a few selected countries' air transport sector. The selection of these countries was merely based on the accessibility of information for that particular country. The selected countries are as follow:

2.6.1 United States of America

With three major mergers in five years in the US, the industry experienced unprecedented consolidation. These efforts yielded excellent outcomes where in 2019 recorded the air transport sector in the United States has been profitable for the eleventh year in a row.

However, the COVID-19 pandemic in 2020 brought an abrupt and cataclysmic end to those boom years. Airline activity and profitability plummeted almost instantly, and airlines would have encountered even significant obstacles without the financial and competitive strength built up during the boom. As it was, they were capable of decreasing capacity and costs, and then, relying on their balance sheets, credit ratings, and brand value, they were able to raise capital through borrowing and fleet restructuring, enabling them to weather the span of setbacks. Several small regional carriers went out of business in 2020, but no mainstream airlines appear to have done.

Air Freight activity was one of the few silver linings, increasing as a result of consumers purchasing goods to increase time spent at home as a result of the quarantine and social distancing, as well as land transportation disruptions caused by worker shortages due to COVID-19 diseases. Following a strong 2021, traffic to/from/within North America will remain strong in 2022 as the US domestic market returns to pre-crisis levels and international travel continues to improve.

Passenger numbers are expected to reach 94% of 2019 levels in 2022, with a full recovery in 2023 (102%), ahead of other regions.

2.6.2 Middle East

To diversify their economies away from depleting oil reserves, some Middle Eastern countries are making significant investments in their aviation sectors. The majority of these investments are focused on the UAE and Qatar, and that include fleet expansions fuelled by enormous airport extensions and infrastructure projects. Because there isn't enough regional demand to satisfy their capacity, these carriers plan to divert international traffic from Europe and the Americas to Asia. As a result, major players, particularly in Europe and Asia, will face immediate consequences. Notwithstanding, findings show that for some markets, Middle Eastern players are adversely situated in terms of parameters such as flight time and required connection flights. With few short-haul markets, the Middle East's emphasis on long-haul connectivity via its gateways resulted in a slow turnaround due to the pandemic. Passenger numbers to/from/within the Middle East are expected to increase by 81% in 2022, 98% in 2024, and 105% in 2025, compared to 2019.

2.6.3 Singapore

Aviation industry is an important part of the Singapore economy, accounting for about 5% of GDP and employing approximately 200,000 people. The air hub also supports other economic sectors in Singapore, such as tourism, manufacturing, and logistics, and it is home to major aerospace companies as reported in the Singapore’s Ministry of Transport website. Singapore is ideally positioned in the centre of South East Asia (SEA). The air hub has been regarded as a world-class in the region with a favourable regulatory environment, leveraging Singapore's strategic geographical location and excellent connectivity to the rest of the world. This enables Singapore to entice key international players, thereby accelerating the growth of the aviation ecosystem. The air hub connects Singapore to over 170 cities via over 125 airlines. Changi Airport is one of the busiest in the world, with approximately 68.3 million passenger movements and 2.01 million tonnes of cargo handled prior to COVID-19 in 2019.

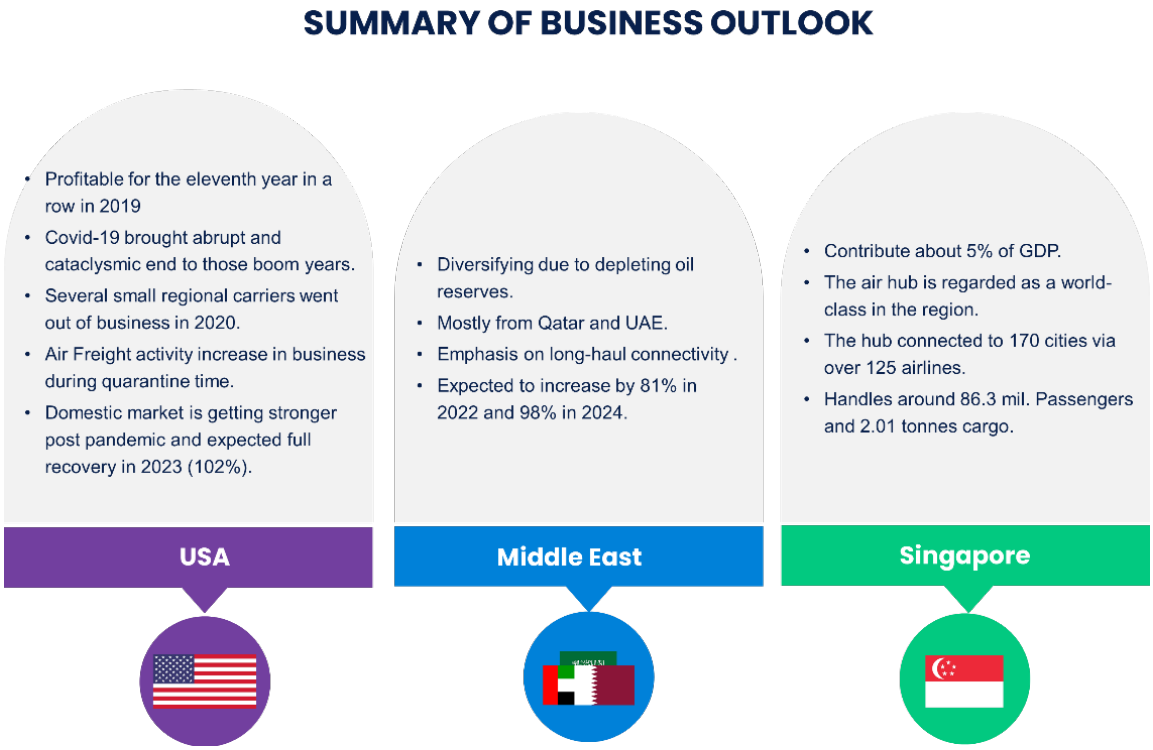

Figure 2.4: Summary of Business Outlook

2.7 Relevancy of Industrial Revolution for Air Transport

Malaysian government recently announced the Fourth National Industrial Revolution Policy, which take effect in 2021. The widespread adoption of current national industrial revolution technologies will propel the digital economy forward, with the goal of transforming Malaysia into a high-tech nation by 2030. The current national industrial revolution refers to the disruptive transformation of industries caused by the use of emerging technology. It is characterised by innovative technology that combines the tangible, digital, and biological worlds, affecting all disciplines, industries, and the economy. The current national industrial revolution policy is divided into four categories for society, business, and government. The thrusts are as follows: first, equip people with current national industrial revolution-related knowledge and skillsets; second, connect the nation through the development of digital infrastructure; third, provide appropriate rules for adapting to technological changes; and finally, accelerate innovation and adoption of current national industrial revolution technology.

The application of current national industrial revolution technologies will be focused on 10 key economic sectors and 6 supporting industries (*Source*: National 4IR Policy, 2021). The 11 technological elements that can support the deployment and optimization of other technologies have been identified as the main elements of the national industrial revolution. The 11 elements of technologies are illustrated in Figure 2.5 below.

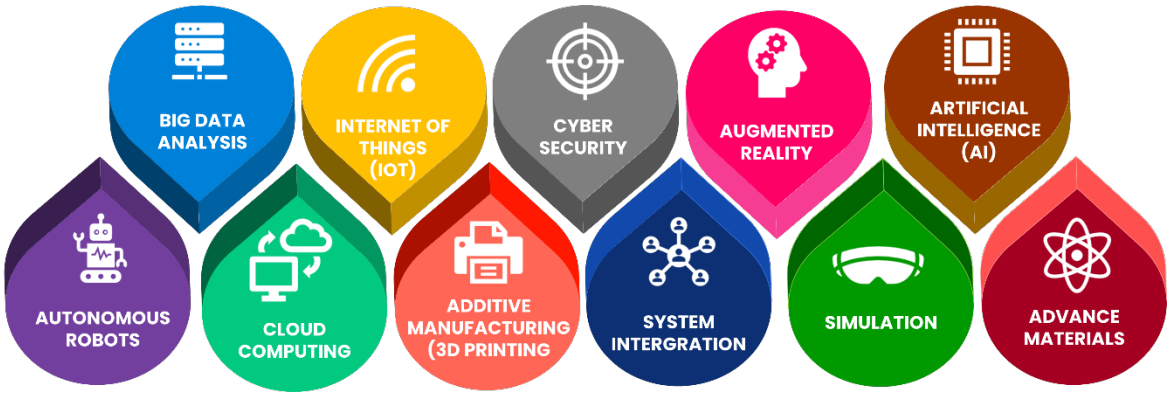

Figure 2.5: Elements of Technologies – Industrial Revolution

Source: MITI – National Policy on Industry 4.0

As depicted in the figure 2.5 above, most of the industrial revolution elements are influencing the air transport sector as a whole especially in terms of skill trainings, improving operational efficiency, enhance customer experience, and increase safety. However, the relevant element influencing on the job of the flight crew as well as cabin crew is limited to the system operations on board of the aircraft and during training. This includes the unmanned aircraft system (UAS). Cabin crew, for example, would use the Integrated System subscribed to by the respective airlines to obtain information about their passengers. When a passenger purchases a flight ticket, the information collected during the transaction is saved in the Airline Integrated System and is then used by the cabin crew to serve the passenger on board. The cabin crew would be aware of a specific passenger's special needs and would be able to provide the service accordingly.

Similarly, flight operations are shifting towards semi-autonomy in aircraft manoeuvring. Digitalization has increasingly transformed work processes in the cockpit to become natively digital. Pilots are increasingly gaining access to a connected ecosystem of apps, services, and

documents that will define the future flight deck. Targeted applications provide pilots with rich, critical information via a single handheld device. As part of an airline's customised digitalized portfolio, these can help them improve operational efficiency, situational awareness, collaboration, and safety processes. Additionally, going digital is a sure-fire way for pilots to reduce workload. For example, being able to upload briefings or submit reports digitally with a device that connects at the gate eliminates layers of administration immediately.

Furthermore, the Malaysia's National Transport Policy 2019-2030 (NTP) also revealed that among of the future trends involved advances in real-time information and digitisation, expansion of e-commerce market and proliferation of new technology. These listed future trends in NTP strengthen the relevancy of technological advancement with air transportation. To back it up, a few thrusts were developed and listed in the NTP. Some of the thrusts are really in tandem with the National Industrial Revolution Policy for example the policy thrust 1: Strengthen governance to create a conducive environment for the transport sector, policy thrust 2: Optimise, build and maintain the use of transport infrastructure, services and networks to maximise efficiency and policy thrust 3: Enhance safety, integration, connectivity and accessibility for seamless journey.

2.8 Key Stakeholders

A stakeholder is any individual, group, organisation, or society at large who has interest in the activities of air transportation. They will also have the ability to influence or be influenced by any actions, goals, and policies emanating from the sector in particular or the economic environment in general. Stakeholders in Malaysia's Air Transport sector include government agencies, regulatory bodies, industry associations, professional bodies, and training institutes.

Table 2.7 below put forward the information on the ministry, agencies and regulatory bodies directly related to Air Transport.

Table 2.7: Ministry, Agencies and Regulatory Bodies directly related to Air Transport.

No	Organisations	Overview, Roles, Functions and Responsibilities
1.	Ministry of Transport	The general function of The Ministry of Transport (MOT) is to moving people and goods safely, efficiently and sustainably across Malaysia to improve quality of life and

No	Organisations	Overview, Roles, Functions and Responsibilities
		support a competitive economy. The functions of MOT for aviation sector are: i. To plan and evaluate aviation policies. ii. To increase international air services network through air negotiation. iii. To plan and monitor implementation of air development projects (development & system) according to standards set by Civil Aviation Authority Malaysia (CAAM) and International Civil Aviation Organization (ICAO) iv. To coordinate civil aviation/air transport legal aspects and procedures on safety and security in accordance with ICAO.
2.	Ministry of Home Affairs (KDN)	Basically, the function of KDN is to maintain safety and public order, manage immigration and border control, rehabilitation and implementation of punishment, manage registry affairs and eradicate drug distribution and addiction. Besides that, this ministry also manages volunteers and societies, regulate publication materials and control of Quranic texts; and regulate film publication and distribution.
3.	Ministry of Human Resource (MOHR)	The Ministry of Human Resources (MOHR) is a ministry under the Government of Malaysia that is responsible for skills development, labour, occupational safety and health, trade unions, industrial relations, industrial court, labour market information and analysis, social security.
4.	Civil Aviation Authority Malaysia (CAAM)	Previously known as Department of Civil Aviation (DCAM) and was formed in 1969 under The Ministry of Transport and responsible as the major technical regulator in charge of overseeing Malaysian civil aviation's safety,

No	Organisations	Overview, Roles, Functions and Responsibilities
		maintenance, and security as well as its enforcement.
5.	Malaysia Aviation Commission (MAVCOM)	The Malaysian Aviation Commission (MAVCOM) was formally constituted on March 1, 2016, in accordance with the Malaysian Aviation Commission Act 2015 (Act 771), as a separate organisation to control economic and commercial issues pertaining to Malaysian civil aviation. The objective of the agency is to encourage the development of a civil aviation sector that is robust, focused on the needs of the customer, and financially successful.
6.	Air Accident Investigation Bureau (AAIB)	All independent safety investigations into aviation accidents and incidents involving both Malaysian- and foreign-registered civil aircraft are the responsibility of the AAIB. In accordance with the International Civil Aviation Organization (ICAO) Convention, the AAIB also takes part in international investigations into aviation accidents and incidents involving aircraft having a Malaysian civil registration. Through continuing research and development initiatives, the AAIB also performs the duties of air accident prevention.
7.	Malaysian Communications and Multimedia Commission (MCMC)	The MCMC is in charge of regulating and promoting the communications and multimedia industry, which includes telecommunications, broadcast, Internet services, postal and courier services, and digital certification. The MCMC delicately balances the consumer, industry, and investor interests.
8.	Malaysia Airport Holdings Berhad (MAHB)	Malaysia Airports Holdings Berhad was formed as a public limited company in 1999 and listed on the Malaysian Stock Exchange (Bursa Malaysia), becoming the first Asian

No	Organisations	Overview, Roles, Functions and Responsibilities
		airport operator to do so and only the sixth in the world. Malaysia Airports is now one of the world's largest airport operator groups in terms of passenger traffic, managing 39 airports in Malaysia (five international airports, 17 domestic airports, and 17 STOLports), as well as one international airport in Turkey.
9.	Jabatan Ukur dan Pemetaan Malaysia (JUPEM)	Malaysia's survey, mapping, and geospatial data management arm is the Department of Survey and Mapping Malaysia (JUPEM). As the national government's survey and mapping advisor, the department actively protects the nation's sovereignty through the demarcation of state and country boundaries.
10.	National Aerospace Industry Corporation Malaysia (NAICO)	An agency under MITI mandated as the national aerospace development agency to spur the development of the industry's ecosystem and to ensure cohesion and coordination of initiatives implemented under the MAIB 2030 and the 12th Malaysia Plan (MP).
11.	Flight Training Organisations (FTOs)	All approved flight training organisations by CAAM. According to CAAM website, there are 18 registered and approved Malaysian FTOs which includes Fixed wing aircraft, helicopter and Unmanned Ariel Vehicle (UAV).
12.	Designated Medical Examiners (DMEs)	Designated Medical Examiners (DMEs) are those professional medical doctors local and overseas approved by CAAM as the DMEs.

2.9 Government Legislation

Table 2.8 below depicts several main pieces of Malaysia legislations concerning Air Transport.

Table 2.8: Government Legislations

No	Legislations	Descriptions
1.	Civil Aviation Act 1969 (Act 3)	The core piece of legislation for civil aviation in Malaysia. An Act to improve the law relating to civil aviation, as well as matters connected with and supplemental to it
2.	Carriage By Air Act 1974 (Act 148)	An Act to give effect to certain Conventions relating to air carriage and to provide for matters connected with and ancillary to those Conventions.
3.	Aviation Offences Act 1984 (Act 307)	An Act to give effect to the Convention on Offences and Certain other Acts Committed on Board Aircraft signed at Tokyo on 14 September 1963, the Convention for the Suppression of Unlawful Seizure of Aircraft signed at The Hague on 16 December 1970, the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation signed at Montreal on 23 September 1971, and the Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation, concluded at Montreal on 24 February 1988 and for purposes connected therewith.
4.	Airport and Aviation Services (Operating Company) Act 1991 (Act 467)	An Act to provide for the vesting of property, rights and liabilities of the Government of Malaysia relating to civil aviation in a company, to make financial arrangements for that company, to provide for matters relating to staff and for other matters connected therewith.
5.	International Interest in Mobile Equipment (Aircraft) Act 2006 (Act 659)	An Act to implement the Convention on the International Interests in Mobile Equipment, and the Protocol to that Convention on International Interests in Mobile Equipment on Matters Specific to Aircraft Equipment, and to provide for matters connected therewith

No	Legislations	Descriptions
6.	Malaysia Aviation Commission Act 2015 (Act 771)	An Act to establish the Malaysian Aviation Commission to regulate economic matters relating to the civil aviation industry and to provide for its functions and powers and related matters.
7.	Civil Aviation Authority Malaysia Act 2017 (Act 788)	An Act to establish and incorporate the Civil Aviation Authority of Malaysia, to provide for its functions and powers, and for matters connected therewith.
8.	Civil Aviation (Amendment) Act 2017 (Act A1526)	The amended version on Civil Aviation Act 1969. Basically, some of the amendments include the name of the aviation department, some of the titles and authority.
9.	Personal Data Protection Act 2010 (Act 709)	The Personal Data Protection Act of 2010 governs the processing of personal data in commercial transactions and was gazetted in June 2010.

In Malaysia, Air Transport industry is a highly regulated industry. Most of the regulations were stipulated by CAAM which is a government agency formed under the Ministry of Transport in 1969. Previously known as Department of Civil Aviation (DCA) and later in 2018, was incorporated into a statutory body as it is known today. The incorporation of CAAM is in accordance to International Civil Aviation Organization (ICAO) which Malaysia is a Council Member States request, based on the Chicago Convention to establish an autonomous civil aviation authority to ensure efficient management of civil aviation safety and security. CAAM's key functions include regulating, facilitating, and promoting the nation's aviation/aerospace industry, as well as ensuring that Malaysia's national and international obligations in civil aviation matters are met, and that universal safety and security standards and requirements in civil aviation are implemented, complied with, and well-maintained. Another key thing to point out, CAAM was established to ensure that Malaysia's civil aviation industry adheres to the safety standards and procedures recommended by ICAO. Most of the licensing concerning air transport is under the purview of CAAM and that is also includes aerial and sports aviation activity for instance, hot air balloon, gliders, fireworks display and etc. Unmanned Aircraft System (UAS) for example drone is also bound by Civil Aviation Regulation 2016 which is also controlled by CAAM.

Beside the above core pieces of legislations concerning air transport in Malaysia, there are other regulations developed and enacted to regulate the industry. The lists of the regulations are as follows:

1. Civil Aviation Regulations 2016
2. Civil Aviation (Amendment) (No 2) Regulations 2019
3. Civil Aviation (Amendment) Regulations 2019
4. Civil Aviation (Amendment) Regulations 2018
5. Civil Aviation (Amendment) Regulations 2016
6. Civil Aviation (Aerodrome Operations) Regulations 2016
7. Civil Aviation (Aerodrome Operations) (Amendment) Regulations 2018
8. Civil Aviation (Fee & Charges) (Amendment) (No 2) Regulations 2019
9. Civil Aviation (Fee & Charges) (Amendment) Regulations 2019
10. Civil Aviation (Fee & Charges) (Amendment) Regulations 2018
11. Civil Aviation (Fee & Charges) (Amendment) Regulations 2016
12. Civil Aviation (Security) Regulations 2019

In addition, there are another 2 pieces of directives which are also considered as important among the industry player:

1. Civil Aviation Directives (CAD)
2. Civil Aviation Guidance Materials (CAGM)

2.10 International Civil Aviation Regulatory Bodies

Table 2.9 below listed down the renown international regulatory bodies concerning Air Transport.

Table 2. 9: International Regulatory Bodies

No	Association and Professional Bodies	Descriptions
1.	International Civil Aviation Organization (ICAO)	ICAO is a United Nations (UN) agencies which is funded and directed by 193 national governments to support their diplomacy and cooperation in the area of

No	Association and Professional Bodies	Descriptions
		civil aviation. Its core function is to maintain an administrative and expert bureaucracy (the ICAO secretariat) supporting this diplomatic interactions, research new air transport policy and standardization innovations. ICAO also serve as a critical coordination platform in civil aviation and also conducts educational outreach, develops coalitions, conduct auditing, training and capacity building activities worldwide.
2.	European Union Aviation Safety Agency (EASA)	The main role of this agency is to ensure safety and environmental protection in civil aviation in Europe. Basically, the members of this organisation are the 27 EU Countries plus Iceland, Liechtenstein, Switzerland and Norway. Other air carrier company from other part of the world will need to comply to all safety directives and environmental policies by EASA if they are to fly to any part of the member's countries.
3.	The Federal Aviation Administration (FAA)	The main function of this body is to regulate all aspects of civil aviation in the United States of America and its surrounding international waters. That will include the air traffic management, certification of personnel and aircraft, setting the standard of airports while maintaining the safety and security of commercial air transportation.
4.	International Civil Aviation Organization (IATA)	The International Air Transport Association (IATA) is the world's airline trade association, representing approximately 300 airlines and 83% of total air traffic. They provide assistance in many areas of aviation activity and assist in the formulation of industry policy on critical aviation issues.

Any Malaysia's registered air carrier will need to comply to the above listed regulatory bodies protocols if they are going to enter any of the said territories. Beside the above bodies or organization, there are other individual countries aviation agencies that any air carrier will need to adhere to as far as the regulation is concern. Most of the rules and regulations are quite similar since most of them are subjected to International Civil Aviation Organization (ICAO) standards that stipulated in Chicago Convention (1944).

2.11 Conclusion

Based on the review of literatures and relevant documents, it is concluded that air transport is one of the important employability segments within the Malaysian workforce. Despite the country's current pandemic challenges, the various ongoing efforts and initiatives undertaken, as well as the roles played by key stakeholders, demonstrated that the Air Transport sector will continue to be one of the dynamics driving the Malaysian economy. As a result, this Occupational Framework (OF) redefines the Occupational Structure (OS), Occupational Description (OD), in-demand competencies, and critical job titles within the sector, particularly in light of the national fourth industrial revolution policy that will shape the nation's future. The applied methodology that will deliver the objectives of this OF will be discussed in the following Chapter 3.

CHAPTER III

METHODOLOGY

3.1 Introduction

This chapter provides an overview of the study strategy and the methodology employed to accomplish the objectives of this Occupational Framework. In order to ensure the validity and reliability of the outcomes of the study and to fully understand the current trend and future requirement of the Air Transport sector, this study used a systematic research approach that included a sequence of actions and methods, ranging from document analysis to the finalization of the Occupational Framework document. The approach is used to establish deliverables such as Occupational Structure (OS), Occupational Responsibilities (OR), Occupation Description (OD), jobs in demand, critical jobs, competency in demand, jobs relevant to the industry and technological revolution, as well as emerging skills.

3.2 Research Approach and Design

A research design is a framework that determine the way research is conducted including identifying type of data to be used, data collection technique, sampling strategy and analysis approach (Sekaran & Bougie, 2016). A research method is referred to the technique utilized in collection of data or evidence for analysis in order to uncover information to address the matters under investigation (Abutabenjeh & Jaradat, 2018). Facts can be expressed or presented in three different ways, which are quantitatively, qualitatively or by mixing quantitative and qualitative ways based on the objectives of study (Abutabenjeh & Jaradat, 2018). Since the Air Transport sector is heavily regulated by specific authorities, jobs performed within this industry are subject to regulations. As a result, when it comes to roles and responsibilities, the authority's guidelines must be strictly followed. This demonstrates that jobs in this sector are designed to meet specific legal requirements and obligations especially in relations to safety and security. Nevertheless, in terms of the commercial advantage, such as services provided on board, although it is still governed under specific regulations, airlines have the prerogative to add value to it.

Therefore, a qualitative inquiry was used in the process of developing the OF for H51: Air Transportation, first to scrutinise the relevant legal requirements and later to yield understanding

of the job nature and industry practise. To ensure the credibility and robustness of the findings, data was triangulated from multiple methods of data collection, namely document review, face to face interview, Focus Group Discussion and non-participatory observations (Yin, 2018). This triangulation technique, or combining data from multiple sources, is critical for developing converging lines of inquiry. The complementary methods were used with the assumption that the weaknesses of one approach would be compensated for by the strengths of another because different types of data provide cross-data validity checks (Patton, 2002).

The following Table 3.1 is the research design illustrating the stages undertaken in conducting this study in order to develop this Air Transport OF.

Table 3. 1: Research Stages

STAGES	**RESEARCH ACTIVITIES**
PHASE 1*:* *Literature Review and Baseline Information Analysis*	Preliminary information gathering through review of relevant literature, reports, websites, databases, etc.
PHASE 2*:* *Data Collection*	Document review of policy, regulation and guideline sanctioned by the industry authorities.
	Face to face interview with industry expert.
	Focus Group Discussion with the industry authorities and industry experts to validate initial findings.
	Workplace non-participatory observations
PHASE 3*:* *Data Analysis*	Conduct content analysis by iterating between data and regulatory documents.
PHASE 4*:* *Document Writing*	Writing up all chapters of the OF.
PHASE 5: *Validation and submission*	Validation of the OF content through the Industry Engagement session. Submission of the draft is done after revision from the validation session.

The following sections elaborates on the key activities involved following the research design above.

3.2.1 Phase 1: Review of Documents and Baseline Information Analysis.

The main aim for this research is to develop an OF. Preliminary information was gathered through systematic documentation analysis to provide underpinning insight into the industry as well as evidence to support assumptions and arguments. This method necessitates a thorough examination of existing literature as well as reports from relevant official agencies that include both published and unpublished materials, colloquially known as grey literature (Auger, 2017). Grey literature is an important component of a systematic review and adds value to the review because it is frequently more current than published literature and has less publication bias. Unpublished studies, reports, dissertations, conference papers and abstracts, blog posts, videos, white papers, and governmental research reports are all considered grey literature (Garousi, Felderer, et. al., 2019).

The review searches, identifies, selects, evaluates, and synthesizes research evidence to support the OF document's objectives. This method is intended to provide a macro snapshot of the Air Transport landscape and outlook, including industry and employment growth, trends, and prospects at the sectoral level. The research objectives dictated which information sources should be searched. As a result, general searches for Air Transport were conducted at first. The importance of narrowing the scope to answer the questions underhand grows as the topic of the synthesis becomes more focused. There were three main sources considered in this systematic review:

a) Economic Database

Economic Database is used for obtaining all sorts of statistical information related to employment in Air Transport sector that is highly relevant to this study. Thus, certain information has been taken from the website of Department of Statistics Malaysia (DOSM) as well as SOCSO. Information from the Economic Database would provide a snapshot of the current landscape of the sector.

b) Databases from other agencies

Databases from both local and international agencies that contained relevant information on the Air Transport sector were referred. Among the databases applied were:

i. Department of Skills Development (DSD), Ministry of Human Resource;

ii. Department of Labour, Ministry of Human Resource;

iii. Social Security Organization (SOCSO);

iv. MYFutureJobs Portal (SOCSO, Ministry of Human Resources Malaysia);

v. MySPIKE (Department of Skills Development, Ministry of Human Resources Malaysia);

These databases were in the form of both online and offline sources. From the listed databases, specific documents and reports were retrieved and reviewed, including:

i. Monitoring Occupational Shortages: Lessons from Malaysia's Critical Occupations List 2019 by World Bank Group;

ii. International Air Transport Association (IATA) Annual Review 2017 - 2022;

iii. Malaysia Standard Industrial Classification (MSIC) 2008;

iv. International Standard Industrial Classification of All Economic Activities (ISIC);

v. Malaysia Standard Classification of Occupations (MASCO) 2020;

vi. Malaysia's National Transport Policy 2019-2030 (NTP); and

vii. Industry 4WRD; and

viii. National Employment Matrix (Employment Projections).

c) Published Document

A review of relevant scientific publications in the industry was also carried out.

Information from these three main sources was elaborated in Chapter 2 Literature Review as well as supporting the findings from the analysis; such as the followings:

i. The sector's economic performance as measured by several macroeconomic indicators such as jobs opportunity, passenger traffic, and GDP contribution;

ii. The industry outlook as compared to regional and global perspectives;

iii. The start of technological development in the industry;

iv. The identification of relevant legislations and stakeholders;

v. The underlying background of the sector's issues; and

vi. The support for the findings from data analysis.

3.2.2 Phase 2: Data Collection

This study adopted different data collection strategies such as document review, face-to-face interview, Focus Group Discussion and non-participatory observation (See Figure 3.1). This triangulation technique allows the researcher to look at the specific situation from different angles (Yin, 2003) and overcome equivocal evidence or biased views to influence the direction of the findings and conclusions (Gibbert & Ruigrok, 2010).

Figure 3.1: Data Collection Strategies

a) Document Review

Document review is a systematic collection, documentation, analysis and interpretation, and organization of data as a data collection method in research. Documents can be external or internal to an organisation, and they can be hard copy or electronic. As a useful contribution to qualitative research designs, document review as a method can result in evidence-based guidelines and best practises. All methods have advantages and disadvantages; thus, the selection of any method, including document review, must be consistent with the research question and yield substantive data in order to answer the research question, often serving as a starting point in conjunction with

other methods to triangulate data. A literature review is essentially a summary of the published literature, 'a critical appraisal of other research on a given topic that helps to put that topic in context' (Machi & McEvoy, 2012, p. 2), whereas a document review typically involves a range of specialised techniques of analysis, interpretation, and data handling that are not typically used in literature reviews (Lankshear & Knobel, 2004, p. 58).

The main document that underpins this study is regulated by CAAM. To avoid misinterpretation, the documents was explained by the panel from CAAM during the FGD session. The documents referred to in the development process of this OF in relation to H511 and H512 are listed in the official website of CAAM under the section of Legislation and Regulations.

b) Face to face interview

To achieve the objectives of this OF, a series of face-to-face interview were held with the authorities and a group of industry experts who both, were appointed as development panels. The participation of industry experts on the development panel ensured that the Occupational Framework was current and relevant.

i. Face to face interview with the Authority

The Civil Aviation Authority Malaysia (CAAM) is Malaysia's primary air transportation authority. CAAM, as the regulator, is responsible for providing and sanctioning industry legislation and regulation including the occupation H51: Air Transportation. Two (2) senior officers from CAAM were appointed to represent the organization as the development panel in this OF. The interview session centred on understanding the statutory requirements and gaining an understanding of their role as the regulatory body.

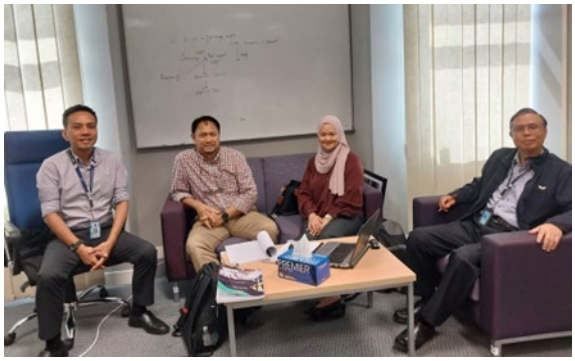

Figure 3.2: Face to Face Interview at CAAM

ii. Face to face interview with the selected industry expert from the industry main players

The participants were selected based on the purposive sampling, a non-random sampling method in which "the researcher specifies the characteristics of the population of interest, and locates individuals with those characteristics" (Johnson & Christensen, 2010, page 231). Therefore, such individuals would be information-rich cases that are suitable for in-depth study (Wellington, 2000). This is because the unit of analysis is appropriately chosen based on "what is happening to individuals in a setting and how individuals are affected by the setting" (Patton, 2002, page 228). This strategy is most beneficial when data is investigated, evaluated, and analysed simultaneously as it is gathered (Hoeber et al., 2017). Sixteen (16) industry experts from the industry main players representing different types of organizations were selected purposively due to their availability to provide a comprehensive and in-depth understanding of the research context based on their perspective and working environment.

In the context of this study, there are three (3) conditions for selecting the panels, (1) the selected industry panel directly involved or experienced the phenomenon or event being studied, (2) ability to communicate with researchers, and (3) be prepared to provide information on the experiences they have had (Magilvy & Thomas, 2009). On top of that, the panels should have a minimum of seven (7) years of working experience at the management level in the area under study to ensure rich and reliable data gathering.

At the beginning of each interview sessions, researcher briefed the participants on the purpose of the whole exercise and how the data collection will be conducted. They were also made known of the expected output and the impact of their involvement in the development of this OF.

Figure 3.3: Face to face interview at Malaysia Airlines Berhad Academy

Figure 3.4: Face to face interview at IATAC

Figure 3.5: Face to face interview at MYAirlines

Figure 3.6: Face to face interview at AirAsia

Figure 3.3 to 3.6 are the photographs took by the researcher at the respective industry experts' office. During the face-to-face interviews, the focus of discussion was on developing the OS, OR and OD.

c) Focus Group Discussion (FGD)

A Focus Group Discussion was conducted upon completion of the face-to-face interviews. The discussions were facilitated by the researchers to elicit collective views from multiple perspectives simultaneously (Braun & Clarke, 2013). The aim was two-fold:

i. to gather data on the critical jobs, competency in demand, job relevant to IR and emerging skills;
ii. to obtain feedback and verification on the validity and usability of the findings. In other words, the researcher brought a group of people together to discuss and verify the data gathered through document review and face to face interviews.

FGD allows the focus group participants to hear from one another and reflect on their responses as a group. They can also question each other's reasoning for holding a particular viewpoint (Berg, Lune & Lune, 2012). This technique allows the understanding of how members of the group came to certain conclusions, which would not be possible by only conducting one-on-one interviews. During a focus group, an individual may respond in a specific way. Still, as he or she listens to others' responses, he or she may want to qualify or modify a viewpoint that is useful in eliciting a wide range of different responses (Bryman & Buchanan, 2018).

Four (4) semi-structured questions were constructed to further guide the discussion. Semi-structured interviews are used because it is similar to everyday conversation which allow participants to respond in their own terms, language and in the way that they think (Qu & Dumay, 2011). It adds flexibility to the investigation (Cohen et al., 2007) because it is guided by some predetermined knowledge, which in this context, the regulator's guidelines. Even though the questions in semi structured interviews were predetermined through the use of a list of questions as the interview guide, the sequence of the questions can be modified following the participants' construction of ideas (Robson, 2002).

The following are the semi-structured questions used:

i) What are the critical jobs for the Air Transport sector and how to determine them?

ii) What are the relevant job titles that are in line with the technology advancement and industrial revolution? What is the type of technology involved?

iii) What are the emerging skills for the Air Transport sector and what cause them?

iv) What are the issues around the Air Transport sector?

List of industry experts involved in FGD is listed in Table 3.2 below.

Table 3.2: FGD Industry Expert

NO.	NAME	POSITION	ORGANISATION
1.	Mr. Jonathan Gary Choe	Crew Safety Instructor	MAB Academy

NO.	NAME	POSITION	ORGANISATION
2.	Ms. Pong Pui See	Cabin Crew Manager	Air Asia
3.	Ms. Sri Shantini Baratharajoo	Cabin Safety Training Specialist	Air Asia
4.	Captain Rajindar Singh	Flight/Ground Instructor	AirAsia
5.	Ts. Abd Razak Bin Mohamad Zin	Engineering Manager	International Aero Training Academy (IATAC)
6.	Mr Don Benedict Tan Peng Hock	Head, Cabin Crew	MYAirline
7.	Ms Mandy Pui Hwei Yoong	Manager, Recruitment & IR	MYAirline
8.	Ms. Darleena binti Abdullah	Logistics Consultant & Trainer	Freight Resources & Services Sdn Bhd
9.	Mr. Azrizal Irwan bin Arshad	Head of Drone Program	Allied Aeronautics Training Centre

The photos in Figure 3.7 were taken during the FGD session on 29th – 30th January 2023. The first part of the session was spent to validate the OS, OR and OD.

Figure 3.7: Focus Group Discussion (FGD)

Subsequently, the researchers actively probe questions to steer the discussions in identifying critical job titles, competencies in demand, job titles relevant to the technology and industrial revolution, and relevant industry challenges. Probing is of critical importance in obtaining meaningful responses and uncovering hidden issues.

Summary of the data collection with the development panels are listed in Table 3.3 below:

Table 3.3: Occupational Framework Development Sessions

Date	Venue	Activity
7/11/2022	CAAM, Putrajaya.	**Face to face Interview: CAAM** • Identification and explanation of relevant policy, regulation and guideline.
11/11/2022	Malaysia Airlines Academy, Kelana Jaya, Selangor	**Face to face Interview: Malaysia Airlines Berhad Academy (MABA)** • Development of Occupational Structure and job levelling

Date	Venue	Activity
		• Identification of Occupational Responsibilities (OR) and Occupational Description (OD)
28/11/2022	IATAC, Batu Berendam, Melaka	**Face to face Interview: International Aero Training Academy Sdn. Bhd. (IATAC)** • Development of Occupational Structure and job levelling • Identification of Occupational Responsibilities (OR) and Occupational Description (OD)
19/12/2022	MYAirline	**Face to face interview: MYAirline** • Development of Occupational Structure and job levelling • Identification of Occupational Responsibilities (OR), Occupational Description (OD)
27/12/2022	AirAsia	**Face to face interview: AirAsia** • Development of Occupational Structure and job levelling • Identification of Occupational Responsibilities (OR), Occupational Description (OD)
29/1/2023	Mines Beach & Resort	**FGD: All development panels** • Verification of Occupational Structure, Occupational Responsibilities (OR) and Occupational Description (OD) • Identification and verification of job in demand, critical job, job relevant to IT and technology and emerging skill. • Discussion on current issue in the industry

The list of experts (from FGD and face to face interview) is included in the list of development panel members in **Annex 1**: List of Contributors.

d) Workplace non-participatory observations

Alongside the face-to-face interviews and FGD, the data was also triangulated with observations. In other words, the information was supported by direct visual evidence that could be used to determine actual behaviour in the situation. In this study, a non-participatory observation method was employed. With the information from the regulator's guidelines, observation was primarily used to confirm the pattern of actual behaviours as they occur naturally or unexpectedly, as seen through the researcher's eyes (Patton, 2002; Thomas, 2003). A checklist of what will be observed was used to guide the observation. Throughout the observation process, field notes were taken to capture observable events and task involvement by documenting any relevant behaviour, incidents, and actions as they occurred.

Figure 3.8: Examples of Non-Participatory Observation Site

Two (2) non-participatory observations were conducted on board the aircraft on 4th November 2022 (international route) and 25th November 2022 (local route), both in different airlines. The aim is to observe the actual behaviour at work environment to validate the interview data as well as review of the regulator's documents. The participants were informed of the exercise and briefed on the purpose of the study prior to the observation. They could choose whether or not to allow the observation exercise at this point, but fortunately, they responded positively and

allowed researchers to observe even in the galley. They also provide useful information about each task while performing it. Figure 3.8 above depicts one of the observation sites.

3.2.3 Phase 3: Data Analysis and Content Validation

All data collected from face-to-face interview and observations were discussed and analysed using the content analysis method. The entire face to face interviews were verbatim recorded and transcribed. According to Roulston and Choi (2018), recording is an essential part of qualitative data collection and its analysis as it improves the broadness and accuracy of qualitative data. Additionally, recording also allows the researcher to give researchers fully concentrate on asking questions and responding to the interviewee's answers (Neal et al., 2015).

The data was then reviewed and interpreted to generate codes and emerging themes. The findings section was organised around recurring issues and main themes that summarised the responses of all participants. Iterating between data and the regulator's guidelines was used to carry out the process. Industry experts then validated the findings to ensure their dependability and accuracy.

The following were the results of data analysis:

a) Development of Organizational Structure, Occupational Responsibilities and Occupational Descriptions;

b) Analysis of jobs in demand and critical jobs;

c) Analysis of competency in demand;

d) Determination of the jobs relevant to the technology and industrial revolution;

e) Identification of the emerging skills; and

f) Identification of issues relevant to the industry.

3.2.4 Phase 4: Document Writing

Writing up the document was done progressively. The document reported the whole process of the study and captured the findings in accordance with the research objectives.

3.2.5 Phase 5: Validation and Submission of OF

The findings were presented before the industry practitioners on 23 March 2023 through an online engagement session to get feedback on the validity and usability of the document. The OF draft was revised based on the feedback received. Subsequently, the draft was submitted for publication.

3.3 Conclusion

This chapter elaborated on the methodology used in the development of the Occupational Framework which is through 4 stages such as the literature review, data collection, data analysis and document writing. The findings on the Occupational Structure, Occupational Responsibilities and Description are presented in the next chapter, Chapter 4 Findings.

CHAPTER IV

FINDINGS

4.1 Introduction

This chapter elaborates the findings from the analysis of data collected during the research work. The findings revolved around the objectives set for the study, namely to produce Occupational Structure (OS), Occupational Responsibilities (OR) and to define the Occupational Descriptions (OD) of each job titles identified from the OS. Additionally, the findings will also determine the jobs in demand and the critical job titles in the industry as well as investigate the competency in demand and job titles pertinent to the technology and industrial revolution. Finally, mapping of OS to the available National Occupational Skills Standard (NOSS) is also presented.

4.2 Findings Analysis

This section provides the findings from the analysis of the document review, the interview sessions, Focus Group Discussions (FGD) with the industry representatives and through the on-site observations; to develop the Occupational Framework (OF) for the Air Transport sector. The discussion of results will cover the two (2) main groups under Division H51 of MSIC 2008; which are:

511 Passenger Air Transport

512 Freight Air Transport

The identification of job areas and job titles to produce OS, OR and OD for the Air Transport sector was obtained through series of interview session with industry representatives at their respective premises.

As for the data related to the jobs in demand, skills in demand, critical job titles, job titles relevant to the technology and industrial revolution as well as emerging skills, they were gathered through the FGD with selected industry representatives. Additionally, issues related to the Air Transport sector were also reported.

4.3 Occupational Structure (OS)

Occupational Structure (OS) refers to the aggregate distribution of occupations in the organization; classified according to skill level, economic function, or social status. Based on the interview sessions and FGD with the industry representatives, there are altogether 5 job areas with overall of 24 job titles. 6 critical job titles and all 24 identified job titles are related to technology and industrial revolution within the Air Transport sector; all of which will be featured in the OS.

The OS is presented on the following pages; beginning with Table 4.3 and Table 4.6. The tables also show critical job titles with a single asterisk (*), jobs relevant to technology and the industrial revolution with two asterisks (**), and critical job titles and jobs relevant to technology with a triple asterisk (***). Following that, Table 4.4 and Table 4.6 provides a quantifiable summary of all job titles in the OS.

Table 4.1: Overall of Job Title in H51: Air Transportation

No.	Occupational Structure (OS)	Total of Job Titles	Total Critical Job Tittle	Total Job Related to Technology and Industrial Revolution
1.	**H511**: Passenger Air Transport	14	4	14
	• Flight Crew	6	1	6
	• Cabin Crew	6	2	6
	• Safety On-board Cabin Crew	2	1	2
2.	**H512**: Freight Air Transport	10	2	10
	• Unmanned Aircraft System Flight Crew	4	1	4
	• Freight Flight Crew	6	1	6
	TOTAL	**24**	**6**	**24**

The job areas are defined as shown in Table 4.2 below.

Table 4.2: Description of Job Areas

H511: Passenger Air Transportation		
No.	**Job Area**	**Description**
1.	Flight Crew	Occupation that takes charge for the operation of an aircraft during flight.
2.	Cabin Crew	Occupation that involves maintaining flight safety and provides hospitality to the airline passenger on board.
3.	Safety On-Board Cabin Crew	Occupation that involves maintaining flight safety and provides hospitality to the airline passenger on board as well as taking role as an evaluator for safety.
H512: Freight Air Transportation		
No.	**Job Area**	**Description**
1.	Unmanned Aircraft System (UAS) Flight Crew	Occupation that controls the unmanned aircraft that required for the pilot in command to operate remotely. (See Figure 4.1)
2.	Freight Flight Crew	Occupation that takes charge for the operation of an aircraft during flight (freight).

Figure 4.1: Unmanned Aircraft System (UAS)

Table 4.3: Occupational Structure – H511

MSIC SECTION	(H) TRANSPORTATION AND STORAGE		
MSIC DIVISION	(51) AIR TRANSPORT		
MSIC GROUP	(511) PASSENGER AIR TRANSPORT		
AREA / LEVEL	FLIGHT CREW	CABIN CREW	SAFETY ON-BOARD CABIN CREW
LEVEL 8	Director of Flight Operations (DFO)**	NJT	NJT
LEVEL 7	Designated Flight Examiner (DFE)**	NJT	NJT
LEVEL 6	Flight Instructor (FI) **	Cabin Operations Manager**	NJT
LEVEL 5	Captain***	Purser Exec**	Cabin Safety Inspector (CSI)***
LEVEL 4	First Officer (FO)**	In-Charge Cabin Crew (ICC) Wide Body***	Line Checker**
LEVEL 3	Second Officer**	In-Charge Cabin Crew (ICC) Narrow Body***	NJT
LEVEL 2	NJT	Cabin Crew**	NJT
LEVEL 1	NJT	Trainee Cabin Crew**	NJT

NJT – No Job Title

* Critical Job/ High Demands

** Jobs relevant to technology and industrial revolution

*** Critical Jobs and jobs relevant to technology and industrial revolution

Table 4.4: Summary of Job Titles – H511

SUMMARY OF JOB TITLE FOR (H511)									
NO.	JOB AREA	LEVEL							
		1	2	3	4	5	6	7	8
(511) PASSENGER AIR TRANSPORT									
1.	Flight Crew	NJT	NJT	1	1	1	1	1	1
2.	Cabin Crew	1	1	1	1	1	1	NJT	NJT
3.	Safety On-Board Cabin Crew	NJT	NJT	NJT	1	1	NJT	NJT	NJT

NO.	JOB AREA	LEVEL							
		1	2	3	4	5	6	7	8
1.	IDENTIFIED JOB TITLE (PER LEVEL)	1	1	2	3	3	2	1	1
2.	TOTAL IDENTIFED JOB TITLE	14							
3.	CRITICAL JOB TITLE (PER LEVEL)	0	0	1	1	2	0	0	0
4.	TOTAL CRITICAL JOB TITLES	4							
5.	JOB TITLES RELEVANT TO TECHNOLOGY & INDUSTRIAL REVOLUTION (PER LEVEL)	1	1	2	3	3	2	1	1
6.	TOTAL JOB TITLE RELEVANT TO TECHNOLOGY & INDUSTRIAL REVOLUTION	14							

NJT -NO JOB TITLE

Table 4.5: Occupational Structure – H512

MSIC SECTION	(H) TRANSPORTATION AND STORAGE	
MSIC DIVISION	(51) AIR TRANSPORT	
MSIC GROUP	(512) FREIGHT AIR TRANSPORT	
AREA / LEVEL	UNMANNED AIRCRAFT SYSTEM (UAS) FLIGHT CREW	FREIGHT FLIGHT CREW
LEVEL 8	NJT	Director of Flight Operations (DFO)**
LEVEL 7	NJT	Designated Flight Examiner (DFE)**
LEVEL 6	NJT	Flight Instructor (FI) **
LEVEL 5	Flight Operation Manager (FOM)**	Captain***
LEVEL 4	UAS Flight Administrator***	First Officer (FO)**
LEVEL 3	Remote UAS Pilot**	Second Officer**
LEVEL 2	Payloader **	NJT
LEVEL 1	NJT	NJT

NJT – No Job Title

* Critical Job/ High Demands

** Jobs relevant to technology and industrial revolution

*** Critical Jobs and jobs relevant to technology and industrial revolution

Table 4.6: Summary of Job Titles – H512

SUMMARY OF JOB TITLE FOR (512) FREIGHT AIR TRANSPORT									
NO.	JOB AREA	LEVEL							
		1	2	3	4	5	6	7	8
(512) FREIGHT AIR TRANSPORT									
1.	Unmanned Aircraft System (UAS) Flight Crew	NJT	1	1	1	1	NJT	NJT	NJT
2.	Freight Flight Crew	NJT	NJT	1	1	1	1	1	1

NO.	JOB AREA	LEVEL							
		1	2	3	4	5	6	7	8
1.	IDENTIFIED JOB TITLE (PER LEVEL)	0	1	2	2	2	1	1	1
2.	TOTAL IDENTIFED JOB TITLE	10							
3.	CRITICAL JOB TITLE (PER LEVEL)	0	0	0	1	1	0	0	0
4.	TOTAL CRITICAL JOB TITLES	2							
5.	JOB TITLES RELEVANT TO TECHNOLOGY & INDUSTRIAL REVOLUTION (PER LEVEL)	0	1	2	2	2	1	1	1
6.	TOTAL JOB TITLE RELEVANT TO TECHNOLOGY & INDUSTRIAL REVOLUTION	10							

NJT -NO JOB TITLE

4.4 Occupational Responsibilities (OR)

The Occupational Responsibilities (OR) describe the main duties of each of the job titles listed under the Occupational Structure (OS), which also corresponds with the particular job's respective area and level. The OR listed in this section may include but are not limited to the OR within the Air Transport sector. The OR will serve as the future reference for the development of the National Occupational Skills Standard (NOSS) for the Air Transport occupation under the MSIC 2008, Division H51. (Group: H511 and H512)

The OR are presented on the following pages, from Table 4.7 to Table 4.8.

Table 4.7: Occupational Responsibility (OR): H511

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
LEVEL 8	Director of Flight Operations (DFO) • An active Pilot with the status of Pilot in Command (PIC) responsible to lead the Flight Operations Department effectively in accordance with regulatory, company, ICAO and IOSA requirements, and ensure continuous compliance to all applicable CAAM and International regulations and standards. • Responsible for developing, implementing and following up on aircraft operations related projects that will enhance safety, optimize operation, reduce operating cost and preserve the company's contractual rights. • The management of safety risk and security threats to aircraft operations. • Call for a hearing in case of accident or incident or whenever he deems it as necessary in case of irregularity. • Oversee safety, training and development of the flight crew members and ensuring that all necessary certifications are up to date. • Operations are conducted in accordance with conditions and restrictions of the Air Operator Certificate (AOC) and in compliance with applicable regulations and standards of the company.	NJT	NJT
LEVEL 7	Designated Flight Examiner (DFE) • Ensure the standards of the flight crews as required by the regulatory and company requirements. • To conduct training and checking as per the Operations	NJT	NJT

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
	Manual requirements. • To remain impartial and record only factual observations made during checks and training. • To ensure that safety is assured at all times in the aircraft and simulator. • Development of content and method of training. • Quality control by ensuring a uniform standard of grading and assessment. • Ensure of a high standard of all flight crew released from the Training Section. • Ensure approved methods of training are used. • Identification of non-standard methodologies. • Instructor training, monitoring and checking. • Analyse of poor progress and failures recommendation of courses of remedial training. • Conduct skill tests for the issue of type ratings for multi-pilot aircraft.		
LEVEL 6	Flight Instructor (FI) / Ground Instructor (GI) • To uphold the high standards of all flight crews as required by the regulatory bodies and the airline. • To conduct training and checking as per the Operations Manual requirements. • Development of content and method of training. • Development of training documentation. • Development of training projects. • Development of section input for operational SOPs. • Quality control by ensuring a uniform standard of grading and assessment. • Maintenance of a high standard of all flight crew released from the Training Section. • Ensuring approved methods of training are used. • Identification of non-standard methodologies. • Instructor training, monitoring and checking.	Assistant Manager Standards & Performance / Cabin Operations Manager / Assistant Cabin Crew Manager • Is responsible to the Head of Cabin Crew in supervising Operations of the Department and to ensure Cabin Crew comply and strictly adhere to stipulated Company policies and Regulatory Standards expected of the company. • To manage and control Cabin Crew Operations workforce, to ensure crew acquire knowledge and skills to deliver the highest level of Cabin Operations delivery to meet Corporate, Safety & Security Regulatory Standards expected of the Company. • Responsible in executing safety and operational related matters pertaining to Cabin Crew.	NJT

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
	• Analysis of poor progress and failures recommendation of courses of remedial training. • Give flight instruction for the issue of a type rating including Crew Resource Management (CRM) training in the appropriate category and multi crew cooperation. • To remain impartial and record only factual observations made during checks and training. • To ensure that safety is assured at all times in the aircraft and simulator. • Conduct of line checks.		
LEVEL 5	Captain **Prior to Flight:** • Responsible for the safety of aircraft, its occupants and cargo begin from the time he takes control of the aircraft and ends when he hands over the aircraft to the authorized ground personnel or the next flight crew taking charge or when the aircraft is parked, locked and sealed. • Ensure that the pre-flight inspection has been carried out, and decide whether or not to accept the aircraft with unserviceability allowed by the Configuration Differential List (CDL) or Minimum Equipment Lists (MEL). • Ensure the FO's (First Officer)/Co-Pilot required documents are carried and valid. • Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base. • Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS. • Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan.	In-flight Supervisor Performance / Cabin Crew Executive / Purser Executive • Direct reporting line to Cabin Operations Manager. • Purser Executive is also responsible to the Head of Cabin Crew for ensuring that all Standard Operating Procedures (SOPs) and emergency procedures are performed by the Cabin Crew, in accordance with the operator's policies, procedures and SEP Manual.	Cabin Safety Inspector (CSI) • Assist to maintain necessary departmental reference documentation and manuals and ensure conformance to the regulatory and company requirement. • Develop and review mandatory safety training syllabus and training programme for both Flight Crew and Cabin Crew. • Evaluate and resolve cabin safety reports and conduct cabin safety investigation and timely closure for the improvement of safety and preventive action. • Develop, update and review examination questions for both Flight Crew and Cabin Crew. • Attend to poor crew safety performance during periodic checks and decide on enhancement training.

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
	• Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy. • Ascertain that the FOB (Fuel on Board) is sufficient and suitable for the safe conduct of the flight. • Make all reasonable steps to ensure that the aeroplane mass and balance is within the calculated limits for the operating conditions. • Be familiar and ensure compliance with the laws, regulations and procedures of those States where operations are conducted. • Providing the operations section with complete and up-to-date information as to the movement and serviceability of his aircraft. **In Flight:** • Be responsible for the operation of the aircraft in accordance with the rules of the air, except that the captain may depart from these rules in circumstances that render such departure absolutely necessary in the interest of safety. • Be responsible for the safety of all crew members, passengers and cargo on board, as soon as he arrives on board, until he leaves the aeroplane at the end of the flight. • His decisions must give absolute priority of safety, and have due regard for legality, economy, passenger comfort and adherence to schedule. • To carry out duties in accordance with the SOP (Standard Operating Procedures) and Operations Manual, including procedures, limitations and performance. • Safely and properly conduct the flight in compliance with the current flight plan. • Monitoring flight progress and aircraft systems and observe surrounding environment and performance of other crews. • Inform ATC of any aircraft or vessel in distress or		

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
	requiring assistance and rendering any assistance of which he is capable without endangering the safety of his own aircraft or its occupants. • Report all cases of infectious disease on board to the medical authorities. Record the details of any birth, death on board, on the incident / occurrence report form provided or, in its absence, the voyage report.		
LEVEL 4	Senior First Officer (SFO)/First Officer (FO) / Co-Pilot **Prior to Flight:** • Ensure the PIC's (Pilot in Command) required documents are carried and valid. • Participate in the preparation of the flight and to attentively monitor its progress in order to be able to assume the authority/responsibility at any given time. • Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base. • Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS. • Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan. • Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy. • Ascertain that the FOB (Fuel on Board) is sufficient for the safe conduct of the flight. • To ensure that a pre-flight inspection is carried out prior to each flight. • Participates in the Captain's crew briefing and make himself aware of all relevant	In-Charge Cabin Crew (ICC) – Wide Body • To participate and uphold the safety and security policies and procedures in line with the departments objectives. • Responsible to the PIC for the conduct, co-ordination and performance of the cabin procedures and safety standards, duties and functions applicable during normal operations, abnormal and emergency situations. • Purser/ICC is also responsible to the Head of Cabin Crew for ensuring that all Standard Operating Procedures (SOPs) and emergency procedures are performed by the Cabin Crew, in accordance with the operator's policies, procedures and SEP manual. • To report any incidents which occur during flight by using the reporting system. • To counsel / brief / mentor fellow CC on board.	Line Checker / Cabin Safety Appraiser / Associate Instructor • Promoting, enforcing and maintaining a high level of cabin operation standard of crew members. • Responsible for ensuring Cabin Operations are conducted in accordance with applicable regulations and standards. • To conduct online crew onboard performance appraisals and/or Cabin Crew Line Checks as required. • To mentor, coach, guide and assess Cabin Crew on Supernumerary (SNY)/ Supervised Line Flight Experience and online crew on ground and in-flight. • To ensure strict enforcement on Cabin Crew Department SOP, provide feedback and analysis.

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
	• aeronautical and meteorological information as well as the relevant papers documenting the aircraft technical status and its anticipated load. **In Flight:** • Executes tasks and functions as the PF (Pilot Flying) of PM (Pilot Monitoring), as delegated by the PIC. • To carry out duties in accordance with the SOP (Standard Operating Procedures), including procedures, limitations and performance, as directed by the PIC. • Safely and properly conduct the flight in compliance with the current flight plan and PIC instructions. • Maintaining a record of flight progress, including ATC (Air Traffic Control) clearances, altimeter settings/readings, meteorology reports, etc on the OFP. • Draws the attention of the PIC on any condition or circumstances that may impair the safety of the flight. • Assisting the PIC in the management of the flight deck. • Monitoring flight progress and aircraft systems and observe surrounding environment and performance of another crew. • In-flight, the Co-Pilot, as directed by the Commander executes the tasks and functions of either the PF or PNF. • Assist the Commander in the management of the flight deck work by observing a well-balanced task distribution systematic co-operation and exchange of information, monitoring the flight progress and the aircraft systems and observing the airspace and the performance of other Flight deck crew members. • Deals with all documents that have to be completed (e.g., Operational Flight Plan, occurrence reports, Voyage Report & etc). • After completion of the flight, the Co-pilot assists the Commander in completing the aircraft documentation, leaving the flight deck clean and tidy for the next flight crew, handing over the aircraft to the next flight crew		

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
	taking charge or to the authorized ground personnel or in absence of an engineer or responsible person, having the aircraft secured and handing over the completed documentation to authorized personnel or forwarding such documents by other means. • If the Commander becomes incapacitated, the Co-Pilot assumes the Commander's authority and responsibility for the aircraft, crew, passengers and cargo.		
LEVEL 3	Second Officer / Junior Co-Pilot **Prior to Flight**: • Ensure the PIC's (Pilot in Command) required documents (license, passport, attestation certificate, etc) are carried and valid. • Participate in the preparation of the flight and to attentively monitor its progress in order to be able to assume the authority/responsibility at any given time. • Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base. • Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS. • Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan. • Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy. • Ascertain that the FOB (Fuel on Board) is sufficient for the safe conduct of the flight. • To ensure that a pre-flight inspection is carried out prior to each flight. • If the Commander becomes incapacitated, the Co-Pilot	In-Charge Cabin Crew (ICC) - Narrow Body • The SCC shall have overall responsibility to the PIC for the conduct, coordination and performance of the cabin procedures and safety standards, duties and functions applicable during normal operations, abnormal and emergency situations. • To be responsible for maintaining good discipline among all Cabin Crew whilst on duty. • To report any incidents which occur during flight by using the reporting system. • To conduct Cabin Crew Appraisal/ Assessment (Cabin Crew / Supernumerary). • To counsel/ brief/ mentor fellow cabin crew on board • To adhere and maintain familiarity with applicable laws, regulation and procedures.	NJT

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
	assumes the Commander's authority and responsibility for the aircraft, crew, passengers and cargo. • Participates in the Commander's crew briefing and make himself aware of all relevant aeronautical and meteorological information as well as the relevant papers documenting the aircraft technical status and its anticipated load. **In Flight:** • Executes tasks and functions as the PF (Pilot Flying) of PM (Pilot Monitoring), as delegated by the PIC. • To carry out duties in accordance with the SOP (Standard Operating Procedures), including procedures, limitations and performance, as directed by the PIC. • Safely and properly conduct the flight in compliance with the current flight plan and PIC instructions. • Maintaining a record of flight progress, including ATC (Air Traffic Control) clearances, altimeter settings/readings, meteorology reports, etc on the OFP. • Draws the attention of the PIC on any condition or circumstances that may impair the safety of the flight. • Assisting the PIC in the management of the flight deck. • Monitoring flight progress and aircraft systems and observe surrounding environment and performance of other crews. • In-flight, the Co-Pilot, as directed by the Commander executes the tasks and functions of either the PF or PNF. • Assist the Commander in the management of the flight deck work by observing a well-balanced task distribution systematic co-operation and exchange of information, monitoring the flight progress and the aircraft systems and observing the airspace and the performance of other Flight deck crew members. • Deals with all documents that have to be completed (e.g., Operational Flight Plan, occurrence reports, Voyage		

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
	Report & etc). • After completion of the flight, the Co-pilot assists the Commander in completing the aircraft documentation, leaving the flight deck clean and tidy for the next flight crew, handing over the aircraft to the next flight crew taking charge or to the authorized ground personnel or in absence of an engineer or responsible person, having the aircraft secured and handing over the completed documentation to authorized personnel or forwarding such documents by other means.		
LEVEL 2	NJT	Cabin Crew • Cabin Crew shall be responsible to the PIC for the conduct, coordination of normal and emergency procedures specified in the OM, and performance of the Cabin Operations. • Is responsible for ensuring that all Standard Operating Procedures (SOPs) and emergency procedures are performed, in accordance with the operator's policies, procedures and SEP manual. • Maintaining a thorough working knowledge of cabin crew emergency drills and procedures. • Being thoroughly familiar with all aircraft galley equipment, catering stowage and passenger amenity equipment and their operation. • Ensure to maintain the high standards of public conduct whilst in circumstances in which they could reasonably be recognized as being a cabin crew. • To adhere and maintain familiarity with applicable laws, regulation and procedures.	NJT
LEVEL 1	NJT	Trainee Cabin Crew • Trainee Cabin Crew shall be responsible to the PIC for	NJT

	OCCUPATIONAL RESPONSIBILITY (OR)		
MSIC SECTION	**(H) TRANSPORTATION AND STORAGE**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
		the conduct, coordination of normal and emergency procedures specified in the Operations Manual (OM), and performance of the Cabin Operations. • Is responsible for ensuring that all Standard Operating Procedures (SOPs) and emergency procedures are performed, in accordance with the operator's policies, procedures and SEP manual. • Maintaining a thorough working knowledge of cabin crew emergency drills and procedures. • Being thoroughly familiar with all aircraft galley equipment, catering stowage and passenger amenity equipment and their operation. • Ensure to maintain the high standards of public conduct whilst in circumstances in which they could reasonably be recognized as being a cabin crew. • To adhere and maintain familiarity with applicable laws, regulation and procedures. • To work under supervision of ICC to gain experience and exposure before being promoted to Cabin Crew.	

Table 4.8: Occupational Responsibility (OR): H512

	OCCUPATIONAL RESPONSIBILITY (OR)	
MSIC SECTION	**(H) STORAGE AND TRANSPORTATION**	
MSIC DIVISION	**(51) AIR TRANSPORT**	
MSIC GROUP	**(512) FREIGHT AIR TRANSPORT**	
AREA / LEVEL	**UNMANNED AIRCRAFT SYSTEM (UAS) FLIGHT CREW**	**FREIGHT FLIGHT CREW**
LEVEL 8	NJT	Director of Flight Operations (DFO) • An active Pilot with the status of Pilot in Command (PIC) responsible to lead the Flight Operations Department effectively in accordance with regulatory, company, ICAO and IOSA requirements, and ensure continuous compliance to all applicable CAAM and International regulations and standards. • Responsible for developing, implementing and following up on aircraft operations related projects that will enhance safety, optimize operation, reduce operating cost and preserve the company's contractual rights. • The management of safety risk and security threats to aircraft operations. • Call for a hearing in case of accident or incident or whenever he deems it as necessary in case of irregularity. • Oversee safety, training and development of the flight crew members and ensuring that all necessary certifications are up to date. • Operations are conducted in accordance with conditions and restrictions of the Air Operator Certificate (AOC) and in compliance with applicable regulations and standards of the company.
LEVEL 7	NJT	Designated Flight Examiner (DFE) • Ensure the standards of the flight crews as required by the regulatory and company requirements. • To conduct training and checking as per the Operations Manual requirements. • To remain impartial and record only factual observations made during checks and training. • To ensure that safety is assured at all times in the aircraft and simulator. • Development of content and method of training. • Quality control by ensuring a uniform standard of grading and assessment. • Ensure of a high standard of all flight crew released from the Training Section. • Ensure approved methods of training are used. • Identification of non-standard methodologies.

	OCCUPATIONAL RESPONSIBILITY (OR)	
MSIC SECTION	**(H) STORAGE AND TRANSPORTATION**	
MSIC DIVISION	**(51) AIR TRANSPORT**	
MSIC GROUP	**(512) FREIGHT AIR TRANSPORT**	
AREA / LEVEL	**UNMANNED AIRCRAFT SYSTEM (UAS) FLIGHT CREW**	**FREIGHT FLIGHT CREW**
		• Instructor training, monitoring and checking. • Analyse of poor progress and failures recommendation of courses of remedial training. • Conduct skill tests for the issue of type ratings for multi-pilot aircraft.
LEVEL 6	NJT	Flight Instructor (FI) / Ground Instructor (GI) • To uphold the high standards of all flight crews as required by the regulatory bodies and the airline. • To conduct training and checking as per the Operations Manual requirements. • Development of content and method of training. • Development of training documentation. • Development of training projects. • Development of section input for operational SOPs. • Quality control by ensuring a uniform standard of grading and assessment. • Maintenance of a high standard of all flight crew released from the Training Section. • Ensuring approved methods of training are used. • Identification of non-standard methodologies. • Instructor training, monitoring and checking. • Analysis of poor progress and failures recommendation of courses of remedial training. • Give flight instruction for the issue of a type rating including Crew Resource Management (CRM) training in the appropriate category and multi crew cooperation. • To remain impartial and record only factual observations made during checks and training. • To ensure that safety is assured at all times in the aircraft and simulator. • Conduct of line checks.
LEVEL 5	Flight Operation Manager (FOM) • Manages an Unmanned Aerial Vehicle flight operations department. • Establishes Operating procedures and policies to include standard flight operations and ground operations policies and safety policies. • Ensures compliance with UAS regulatory body requirements in addition to company procedures. • Maintain safety aspect of operation with regards to the compliance safety culture base	Captain **Prior to Flight:** • Responsible for the safety of aircraft, its occupants and cargo begin from the time he takes control of the aircraft and ends when he hands over the aircraft to the authorized ground personnel or the next flight crew taking charge or when the aircraft is parked, locked and sealed. • Ensure that the pre-flight inspection has been carried out, and decide whether or not

	OCCUPATIONAL RESPONSIBILITY (OR)	
MSIC SECTION	**(H) STORAGE AND TRANSPORTATION**	
MSIC DIVISION	**(51) AIR TRANSPORT**	
MSIC GROUP	**(512) FREIGHT AIR TRANSPORT**	
AREA / LEVEL	**UNMANNED AIRCRAFT SYSTEM (UAS) FLIGHT CREW**	**FREIGHT FLIGHT CREW**
	of Safety Management Implementation. • Manage the airworthiness of the UAS operated under his/ her purview and Aviation Authority requirement of recertification, modification and System Updates. **Others duties and responsibilities:** • Responsible for career development of flight operations personnel. • Coordinate and approve test cards for UAV flight testing and demos. • Coordinate and request CAA restricted airspace as necessary. • Make recommendations for product quality and reliability. • Interact with customers, technical and operator. • Reviews schedules and budgets with program managers. • Acts as a Principal investigator on Accident/Incident Review Committees. • Supervise and grow the flight operations team and capabilities. • Develop and maintain project budgets and schedules. • Develop proposals and explore new business opportunities. • Plan and coordinate pre-flight activities. • Obtain flight waivers and clearances with the proper competent authority (FAA, range manager). • Work effectively with engineering and crew/ loader/ VO teams to integrate payloads in preparation for flight. • Conduct flight readiness and safety reviews. • Conduct post flight reviews and complete documentation. • Perform demonstration of flight and operation chain. • Forecast and update ongoing project costing and deliveries. • Supervises: Unmanned Flight Operations system administrator, Remote Pilots and Crew/ Loader and VO.	to accept the aircraft with unserviceability allowed by the Configuration Differential List (CDL) or Minimum Equipment Lists (MEL). • Ensure the FO's (First Officer)/Co-Pilot required documents are carried and valid. • Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base. • Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS. • Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan. • Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy. • Ascertain that the FOB (Fuel on Board) is sufficient and suitable for the safe conduct of the flight. • Make all reasonable steps to ensure that the aeroplane mass and balance is within the calculated limits for the operating conditions. • Be familiar and ensure compliance with the laws, regulations and procedures of those States where operations are conducted. • Providing the operations section with complete and up-to-date information as to the movement and serviceability of his aircraft. • Assist the Captain to physically check the cargo area to ensure all freights are secured for the duration of the flight. **In Flight:** • Be responsible for the operation of the aircraft in accordance with the rules of the air, except that the captain may depart from these rules in circumstances that render such departure absolutely necessary in the interest of safety. • Be responsible for the safety of all crew members, passengers and cargo on board, as soon as he arrives on board, until he leaves the aeroplane at the end of the flight. • His decisions must give absolute priority of safety, and have due regard for legality, economy, passenger comfort and adherence to schedule. • To carry out duties in accordance with the SOP (Standard Operating Procedures) and Operations Manual, including procedures, limitations and performance. • Safely and properly conduct the flight in compliance with the current flight plan. • Monitoring flight progress and aircraft systems and observe surrounding environment

	OCCUPATIONAL RESPONSIBILITY (OR)	
MSIC SECTION	**(H) STORAGE AND TRANSPORTATION**	
MSIC DIVISION	**(51) AIR TRANSPORT**	
MSIC GROUP	**(512) FREIGHT AIR TRANSPORT**	
AREA / LEVEL	**UNMANNED AIRCRAFT SYSTEM (UAS) FLIGHT CREW**	**FREIGHT FLIGHT CREW**
		and performance of other crews. • Inform ATC of any aircraft or vessel in distress or requiring assistance and rendering any assistance of which he is capable without endangering the safety of his own aircraft or its occupants. • Report all cases of infectious disease on board to the medical authorities. Record the details of any birth, death on board, on the incident / occurrence report form provided or, in its absence, the voyage report.
LEVEL 4	UAS Flight Administrator • Manage the all-relative Concept of Operation (CONOPS) of the operation from Permits application, system application, updating system requirement and UAS integrity check prior flying. • Plan the flight operation through system, flight telemetry, primary and secondary airspace for operation, mitigation plan. • Plan the flight and act as Remote Pilot when it is required to do so in execution of operation. • Manage the system troubleshooting for operation and integrity test requirement. • Liasson with Flight Operation Manager on the distribution of freight and schedule. **Other duties and responsibilities:** • Develop day of flight schedule in the Unmanned Traffic Management (UTM). • Communicate and decimate flight schedule to RPAS. • Coordinate mission dependent resources. • Schedule mission personnel for RPAS. • Schedule loading plan and logistic load. • Establish transport route and set up the Traffic schedule via UTM. • Manage logistics flight plan for day-to-day flight operation. • Manage the UTM system as System Administrator. • Facilitate the mission CONOPS (Concept of Operation). • Secure mission supplies for logistics and UAV operation requirement. • Act as back up RPAS to perform the flight monitoring for the operations. • Identify type of the freight for flight plan and delivery schedule. • Develop the system integrity test for the UTM and telemetry security.	Senior First Officer (SFO)/First Officer (FO) / Co-Pilot **Prior to Flight:** • Ensure the PIC's (Pilot n Command) required documents are carried and valid. • Participate in the preparation of the flight and to attentively monitor its progress in order to be able to assume the authority/responsibility at any given time. • Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base. • Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS. • Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan. • Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy. • Ascertain that the FOB (Fuel on Board) is sufficient for the safe conduct of the flight. • To ensure that a pre-flight inspection is carried out prior to each flight. • Participates in the Captain's crew briefing and make himself aware of all relevant aeronautical and meteorological information as well as the relevant papers documenting the aircraft technical status and its anticipated load. • Assist the Captain to physically check the cargo area to ensure all freights are secured for the duration of the flight. **In Flight:** • Executes tasks and functions as the PF (Pilot Flying) of PM (Pilot Monitoring), as delegated by the PIC. • To carry out duties in accordance with the SOP (Standard Operating Procedures), including procedures, limitations and performance, as directed by the PIC.

	OCCUPATIONAL RESPONSIBILITY (OR)	
MSIC SECTION	**(H) STORAGE AND TRANSPORTATION**	
MSIC DIVISION	**(51) AIR TRANSPORT**	
MSIC GROUP	**(512) FREIGHT AIR TRANSPORT**	
AREA / LEVEL	**UNMANNED AIRCRAFT SYSTEM (UAS) FLIGHT CREW**	**FREIGHT FLIGHT CREW**
	• To meet their security and safety oversight obligations, towards UAS operators and the position, velocity, planned trajectory and performance capabilities of each UA in the airspace through the UTM system.	• Safely and properly conduct the flight in compliance with the current flight plan and PIC instructions. • Maintaining a record of flight progress, including ATC (Air Traffic Control) clearances, altimeter settings/readings, meteorology reports, etc on the OFP. • Draws the attention of the PIC on any condition or circumstances that may impair the safety of the flight. • Assisting the PIC in the management of the flight deck. • Monitoring flight progress and aircraft systems and observe surrounding environment and performance of another crew. • In-flight, the Co-Pilot, as directed by the Commander executes the tasks and functions of either the PF or PNF. • Assist the Commander in the management of the flight deck work by observing a well-balanced task distribution systematic co-operation and exchange of information, monitoring the flight progress and the aircraft systems and observing the airspace and the performance of other Flight deck crew members. • Deals with all documents that have to be completed (e.g., Operational Flight Plan, occurrence reports, Voyage Report & etc). • After completion of the flight, the Co-pilot assists the Commander in completing the aircraft documentation, leaving the flight deck clean and tidy for the next flight crew, handing over the aircraft to the next flight crew taking charge or to the authorized ground personnel or in absence of an engineer or responsible person, having the aircraft secured and handing over the completed documentation to authorized personnel or forwarding such documents by other means. • If the Commander becomes incapacitated, the Co-Pilot assumes the Commander's authority and responsibility for the aircraft, crew, passengers and cargo.
LEVEL 3	Remote UAS Pilot • Verify all pre-flight operation has been conducted. • Verification of payload properly secure via UAS operating system. • Freight goods management. • Planning for freight distribution versus work load of UAS. • Perform UAS trouble shooting from sign of abnormalities. • Flight deployment and flight management sequence. • Communicate with ATC for flight clearance.	Second Officer / Junior Co-Pilot **Prior to Flight**: • Ensure the PIC's (Pilot in Command) required documents (license, passport, attestation certificate, etc) are carried and valid. • Participate in the preparation of the flight and to attentively monitor its progress in order to be able to assume the authority/responsibility at any given time. • Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms

	OCCUPATIONAL RESPONSIBILITY (OR)	
MSIC SECTION	**(H) STORAGE AND TRANSPORTATION**	
MSIC DIVISION	**(51) AIR TRANSPORT**	
MSIC GROUP	**(512) FREIGHT AIR TRANSPORT**	
AREA / LEVEL	**UNMANNED AIRCRAFT SYSTEM (UAS) FLIGHT CREW**	**FREIGHT FLIGHT CREW**
	• Monitor and control the drone's movement and position during flight. • Manage the Ground and Flight support equipment. • Execute the Emergency Recovery Procedure (ERP) as required • Understanding the Concept of Operation requirement and its operational standard scenario. • Maintain detailed records of flight logs and equipment maintenance. **REGULATORY REQUIREMENT:** ***The remote pilot shall:*** • Not perform duties under the influence of psychoactive substance or alcohol or when it is unfit to perform its task due to injury, fatigue, medication, sickness or other causes; • Have the appropriate remote pilot competency as defined in the Special UAS Project Approval and carry a proof of competency while operating the UAS. ***Before starting a UAS operation, the remote pilot shall comply with all of the following:*** • Obtain updated NOTAMs in regards to the area of operations; • Ensure that the operating environment is compatible with the authorised or declared limitations and conditions.	are valid, and current and cover the intended operation until return to home base. • Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS. • Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan. • Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy. • Ascertain that the FOB (Fuel on Board) is sufficient for the safe conduct of the flight. • To ensure that a pre-flight inspection is carried out prior to each flight. • Participates in the Commander's crew briefing and make himself aware of all relevant aeronautical and meteorological information as well as the relevant papers documenting the aircraft technical status and its anticipated load. **In Flight:** • Executes tasks and functions as the PF (Pilot Flying) of PM (Pilot Monitoring), as delegated by the PIC. • To carry out duties in accordance with the SOP (Standard Operating Procedures), including procedures, limitations and performance, as directed by the PIC. • Safely and properly conduct the flight in compliance with the current flight plan and PIC instructions. • Maintaining a record of flight progress, including ATC (Air Traffic Control) clearances, altimeter settings/readings, meteorology reports, etc on the OFP. • Draws the attention of the PIC on any condition or circumstances that may impair the safety of the flight. • Assisting the PIC in the management of the flight deck. • Monitoring flight progress and aircraft systems and observe surrounding environment and performance of other crews. • In-flight, the Co-Pilot, as directed by the Commander executes the tasks and functions of either the PF or PNF. • Assist the Commander in the management of the flight deck work by observing a well-balanced task distribution systematic co-operation and exchange of information, monitoring the flight progress and the aircraft systems and observing the airspace and the performance of other Flight deck crew members. • Deals with all documents that have to be completed (e.g., Operational Flight Plan, occurrence reports, Voyage Report & etc).

	OCCUPATIONAL RESPONSIBILITY (OR)	
MSIC SECTION	**(H) STORAGE AND TRANSPORTATION**	
MSIC DIVISION	**(51) AIR TRANSPORT**	
MSIC GROUP	**(512) FREIGHT AIR TRANSPORT**	
AREA / LEVEL	**UNMANNED AIRCRAFT SYSTEM (UAS) FLIGHT CREW**	**FREIGHT FLIGHT CREW**
		• After completion of the flight, the Co-pilot assists the Commander in completing the aircraft documentation, leaving the flight deck clean and tidy for the next flight crew, handing over the aircraft to the next flight crew taking charge or to the authorized ground personnel or in absence of an engineer or responsible person, having the aircraft secured and handing over the completed documentation to authorized personnel or forwarding such documents by other means. • If the Commander becomes incapacitated, the Co-Pilot assumes the Commander's authority and responsibility for the aircraft, crew, passengers and cargo.
LEVEL 2	Unmanned Aircraft System (UAS) Crew / Payloader / Visual Observer (VO) • Perform all functions of loading and unloading of payload to UAS operations • Operational support of deployed flight operations • Work in groups or independently with minimal or no supervision • Will be required to work odd shifts, weekends, and/or extended hours • Responsible for data management and generation • Provides general logistics functions • Maintain site support equipment • Troubleshoots technical problems and issues and determines technical solutions • Perform test flight abnormalities prior flight • If the Remote Pilot becomes incapacitated, the Crew/ loader assumes the Commander's authority and responsibility for the aircraft, crew, passengers and cargo.	NJT
LEVEL 1	NJT	NJT

4.5 Occupational Description (OD)

Occupational Descriptions (OD) describe a structured and factual statement of a specific job function. The OD within this context refers to the job titles in demand that have been identified as important for the operations of the sector. The OD describes the summary of responsibilities, job level, and competency set such as knowledge, skills and attributes particular to the job. In total, there are 14 job titles under H511 and 10 job titles under H512.

Occupational Descriptions developed in this OF is as presented in **Annex 2.**

4.6 Jobs in Demand and Critical Jobs

This section provides information on the jobs in demand and the critical jobs in the Air Transport sector. Jobs in demand are jobs that are required and important in the smooth running of the main operations of the company. According to the FGD, the 24 job titles in the OS are all classified as jobs in demand. These job titles are important for ensuring that the primary functions of the job, such as ensuring safety and providing excellent customer service, are carried out effectively.

Meanwhile, the critical jobs are jobs in demand but hard to fill and are often short of supply due to the nature of the jobs which require certain skills set. It is also sought-after by employers within the sector. Sought-after means that demand for a job title exceeds the supply of appropriately qualified workers despite efforts on the part of employers to satisfy their demand. It is also considered as the strategic occupation of the industry that is critical to the success of the business. From the FGD, there are 6 critical job titles in the Air Transport sector as shown in Figure 4.2 below.

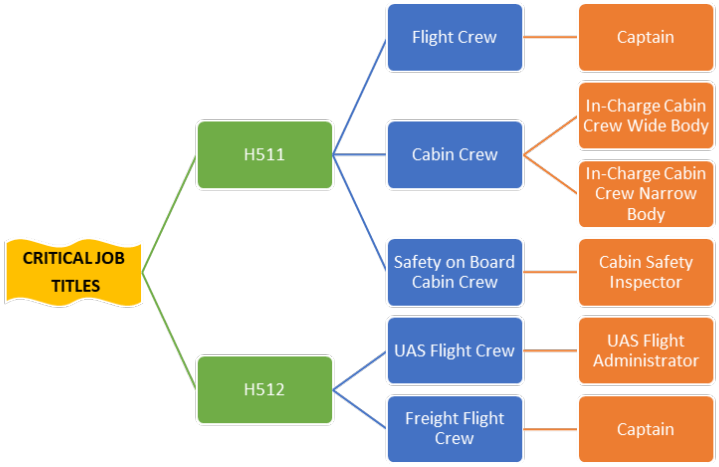

Figure 4.2: Critical Job Titles

Across the board, jobs are relatively easy to be filled but several job titles experienced a shortage in supply. FGD has identified the following factors as the common reasons contributing to the shortage of some of the jobs:

a) The participants in the FGD shared a common view; a lack of ability to converse in English fluently. English proficiency is required because it is the universal business language in aviation. As a result, while it is relatively easy to attract candidates for the job, finding those who meet the ICAO level English test is often difficult. As mentioned by one of the expert panels, "*When we call for an open interview, we usually get a lot of applications. The majority of candidates will pass the physical test in terms of appearance and personality, but it is extremely difficult to find those who can speak English fluently in particularly at the proficiency level set by ICAO*".

b) High salary expectations were identified as a pertinent concern by FGD participants. The salary offered is frequently regarded as inadequate in comparison to the job requirements and performance demands. Many participants shared this view as they feel that it is the time to revise the salary structure to better commensurate with the work responsibilities that they are undertaken. "*We receive a basic salary which we feel relatively low as compared to the demand of the job*" revealed by the panel.

c) FGD participants also discussed the issue of job attrition, which occurs primarily because of competitor poaching or a career change to a different role and position in a different industry. One of the panels said, "*experienced and well-trained crews are more likely to commit to job-hoping. Especially nowadays, we can see the establishment of new airlines that provide benefits that would undoubtedly entice crews to switch companies.*"

In terms of the critical job titles, FGD participants highlighted the pertinent causes to shortage of supply as shown figure 4.3:

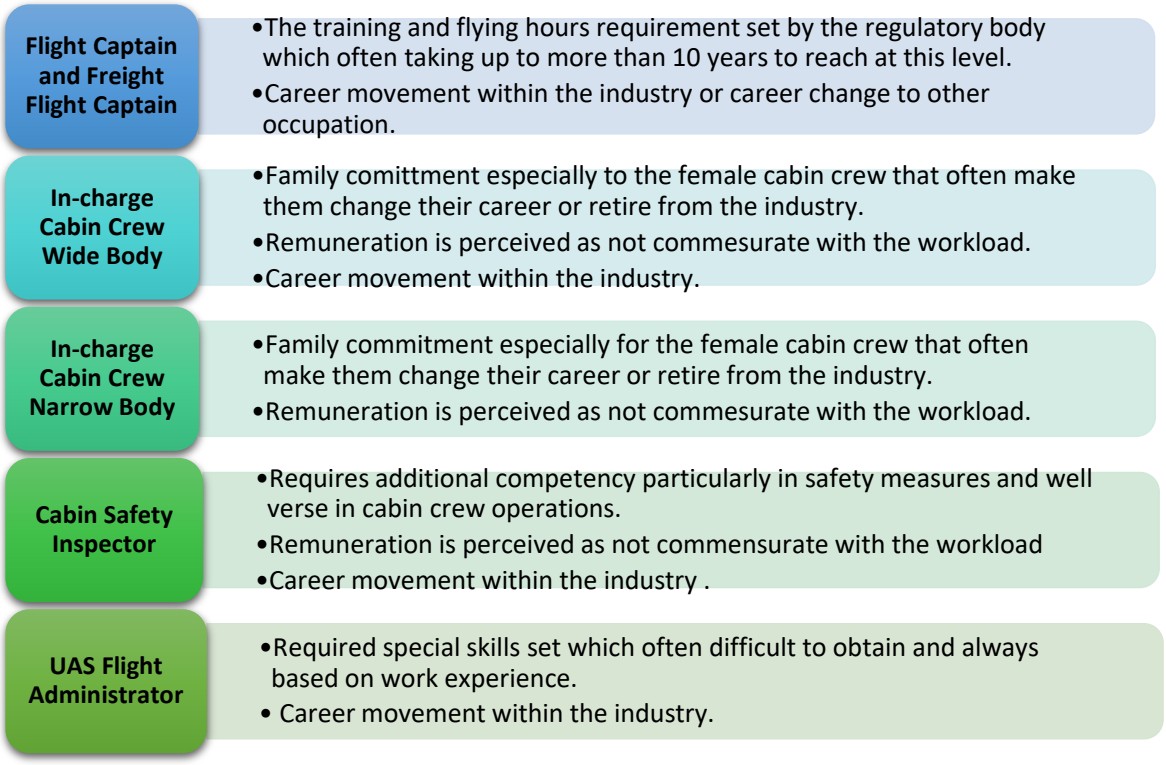

Figure 4. 3: Causes to Shortage of Supply for Critical Job Titles

4.7 Competencies in Demand

This section deliberates the competency that are in high demand in the Air Transport sector. Competency in demand reflects the ability to perform tasks efficiently in accordance with industry standards and generally important for most of the job titles. As shown in Figure 4.4, the competency set is divided into Knowledge, Skills, and Attributes.

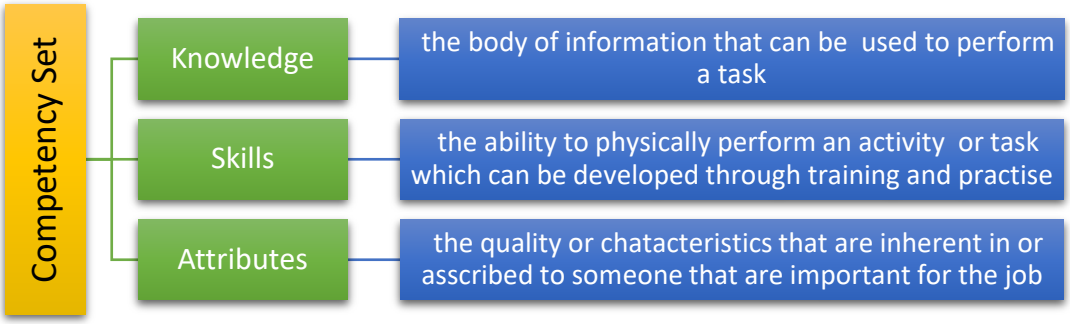

Figure 4. 4: Competency Set

Elicited through the FGD, the competency and its descriptions that are highly important to the Air Transport sector are illustrated in Table 4.9.

Table 4. 9: Competency Set Description

KNOWLEDGE	Description
• **Basic Aviation Theory & Knowledge.**	The basic education of Aviation terminologies and cabin familiarisation. Fundamental knowledge that is required to proceed with training.
• **Policies, procedures, and standards related to the job function.**	Understanding of Civil Aviation regulations, directives, guidance, company policies, procedures and processes, and job functions.
• **Cultural Awareness**	Self-knowledge and awareness about one's own culture and of different culture practice.
SKILLS	**Description**
• **Comply with applicable regulations as well as company policies, procedures, and standards.**	Ability to understand the application of the relevant state regulatory bodies, executing the respective company's policies and procedures in term of safety and security while upholding and maintaining the service standards required.
• **Communication**	Language proficiency in both English and Bahasa Malaysia as well as the ability to communicate in verbal and nonverbal.
• **Interpersonal Skill**	Ability in relating to relationships especially with peers and customers.
ATTRIBUTES	**Description**
• **Attention to detail**	Ability to accomplish/complete a task while demonstrating a thorough concern for all areas involved.
• **Pleasant personality**	Positive outlook, polite, good manners and willingness to provide high standard and quality customer service onboard

• **Resilience**	Ability to adapt to difficult and challenging situations on board and on ground.
• **Discipline**	Ability to comply with established rules and regulations and maintain high standards of performance.
• **Being well groomed**	Well dressed, pleasant personality, friendly, poised, decorum and carries oneself well.
• **Motivated**	Enthusiastic or determined to carry out assigned duties. Having a sense of achievement and self-satisfaction in completing a task well.
• **Emotional Intelligence**	Ability to recognize, understand, manage, and use one's own emotions and the emotions of others in a positive and constructive way.

The competencies listed in the table above are recognised to be important to all job in the Air Transport sector regardless of the level and job titles. However, the level of importance may differ following the specific functional job responsibilities. For example, in the field of Unmanned Aircraft System Flight Crew, some characteristics such as pleasant personality and being well groomed may be less important than in those who work directly with passengers, such as cabin crews. The detail competency set for each job titles is included in the OD.

4.8 Job Relevant to Technology and Industrial Revolution

The Ministry of International Trade and Industry (MITI) identifies eleven (11) element of industrial revolution pillars as described in Chapter 2. However, feedback from the FGD indicated that only eight (8) elements are influencing the job landscape in some way. Table 4.10 illustrates the eight (8) pillars, their elements, and job titles related to the Air Transport sector.

Table 4.10: Elements of Technology & Industrial Revolution Relevant to Passenger Air Transport and Freight Air Transport

No.	Pillars of Technology and Industrial Revolution	Example of Technology Elements Relevant to Air Transport
1.	Internet of Things	The Internet of Things (IoT) is a network of physical devices, vehicles, buildings, and other objects that are embedded with sensors, software, and network connectivity to collect and exchange data. The Internet of Things (IoT) can be used in aviation to improve safety, efficiency, and passenger experience. **Examples**: In-Flight Entertainment, Geofence.
2.	System Integration	The combining of different subsystems or components of a larger system into a single, cohesive system that functions as a whole is referred to as system integration. System integration's goal is to create a unified system that is greater than the sum of its individual parts. This can lead to increased efficiency, performance, and functionality. **Examples**: Airlines Integrated Management System (AIMS), COMPLY 365 Document Management System, Training Management System.
3.	Simulation	The use of computerised models or systems to replicate the experience of flying an aircraft is referred to as simulation in aviation. These simulations can range from simple computer programmes to full-scale, realistic replicas of planes and their environments.

No.	Pillars of Technology and Industrial Revolution	Example of Technology Elements Relevant to Air Transport
		Examples: Full Motion Simulator (level D), Fixed based simulator, Flight Training Device, Synthetic Training Device.
4.	Cyber-security	The measures taken to protect aircraft, airport systems, and other aviation-related technology from unauthorised access, theft, or damage caused by cyber-attacks are referred to as cybersecurity in aviation. With the increased use of technology in aviation, such as automated systems and wireless connectivity, cybersecurity has emerged as a major issue for the industry. **Examples**: Automatic Dependence Surveillance-Broadcast (ADS-B), Secure Information System (SIS).
5.	Cloud Computing	The use of cloud-based technology to store, manage, and process data and applications related to aviation operations is referred to as loud computing in aviation. Instead of relying on local infrastructure, cloud computing allows aviation organisations to access and use computing resources such as servers, storage, and software via the internet. **Examples**: Post Processing Kinematics, Flight Operation System.
6.	Big Data	The term "big data" refers to the massive amount of structured and unstructured data generated by various

No.	Pillars of Technology and Industrial Revolution	Example of Technology Elements Relevant to Air Transport
		sources. Big data in aviation can come from a variety of sources, such as aircraft sensors, weather data, air traffic control systems, passenger data, and maintenance records. **Examples**: Safety Management, Customer Service.
7.	Autonomous Robot	Autonomous robots are outfitted with sensors and other advanced technologies that enable them to navigate their surroundings and carry out tasks without the need for human intervention. They can also be programmed to communicate with other machines and systems, allowing them to collaborate on difficult tasks. **Examples**: Autonomous Flight, Unmanned Traffic Management, Traffic Collision Avoidance System (TCAS).
8.	Augmented Reality – emerging	Augmented reality (AR) is a technology that adds computer-generated information to the real world, such as graphics, sounds, or videos. In aviation, augmented reality (AR) can be used to provide real-time information and visual aids to pilots in order to improve situational awareness and performance. **Examples**: Heads up display, Enhance Vision System (EVS).

The demand for technological skills within the Air Transport has shown that all job titles under H51 are highly related with the technology and industrial revolution as depicted in the table above.

One of the cabin crew highlighted, "… c*urrently, in-flight services are performed manually by the cabin crew. While we recognise that technology can help to improve customer service and experience, the value of the human touch should not be overlooked. Nonetheless, our company uses an integrated system for passenger management. These systems record passenger preferences, allowing cabin crew to know, for example, how passengers prefer to be addressed or whether they want to be awakened for meal service. As a result, we would say that some of our work is also dependent on technology*". This shows that, technology has already transformed the passenger experience, but airlines are now exploring other ways in which flight crews will be able to use digital tools to subtly improve the customer experience. However, where digital technologies truly shine is when they are used to improve the quality of the human experience, ideally without passengers even realising that technology is involved. This subtly enhanced human approach to digital innovation will be the differentiating factor between airlines.

Pilots, on the other hand, are increasingly equipped with advanced technology, with most instruments presented via digital touchscreens and information consolidated from a plethora of sensors onboard, as well as from other aircraft and ground sources. Touchscreens will be used to replace or supplement traditional instruments, allowing users to personalise their display presentation, such as a computer desktop. Some companies envision artificial intelligence-powered flight management systems that can enhance autopilot functionality by optimising flight paths and cruise speed for on-time arrival. The role of the flight engineer has been largely replaced by computerised engine systems. Any malfunction, abnormality, or emergency is displayed on an electronic display panel, and the computer takes corrective action automatically to correct the abnormal condition. While some non-pilot crew members have been replaced by AI, human pilots continue to monitor the systems in the cockpit. Hands-on piloting by human pilots may be reduced with advanced AI technology. Instead of having direct manual control, human pilots may be able to issue commands to the computer.

Nonetheless, the expert panels believe that technology will not advance to the point where passenger aircraft will fly without pilots, at least not in the next 25 years. They also stated that even if this is the case, at least one pilot may be required because a fully automated system may not be able to deal with the compounding failures that can occur. In other words, fully autonomous aircraft without a pilot are unlikely to fly commercial passenger operations in this timeframe. This

is due in part to technological, regulatory, and legal challenges, but also to manufacturer product timeframes.

4.9 Emerging Skills

Emerging skills are defined as skills that are predicted to be critical to the industry in the near future based on recent developments, trends, government policy, or research, such as the technology revolution, business competitiveness issues, and many others. Table 4.11 presents the emerging skills identified as having a significant impact on the future of the Air Transportation sector, as well as the reasons that lead to the requirement of such skills.

Table 4.11: Emerging Skills and Requirement

Emerging skills	Reasons for the requirement
1. Computer Literacy and Usage of Computer Programs.	Computer literacy and knowledge of using programs for Cabin Crew in the past and even current is not part of the regulatory requirements. Having said that, most if not all, airline companies do not require computer literacy or knowledge of programs. However, with the emergence of more airlines embracing technology and going paperless, airlines are using programs to run administration and operations. An example of current airlines operating systems is as below: i. **AIMS (**Airlines Integrated Management System), system used for operations, roster scheduling, regulatory compliance. **ii.** **COMPLY365/DOCUNET/AERODOCS.** Document management, Manual authoring, Form creations, Regulatory control & compliance. **iii.** **PELESYS.** Training, computer-based training, exams, home based study, creation of examination questionnaires. Inevitably, airline companies will look at this as an advantage for

Emerging skills	Reasons for the requirement
	prospective candidates to possess. The Internet and technological progress, in general, have long been determining everyday working life across most industries. As airline management are looking at integrating cabin crew flying duties with office/administration duties, as a means of cost savings and this is what most airlines are moving towards to**.** What is being referred to here is a much wider framework than using application software, such as Microsoft Word, Excel or PowerPoint. For example; Learning online, the handling of personal data (data protection), being able to discern fraud, phishing and hacking sites and being able to retrieve correct and accurate information etc.
2. Artificial Intelligent	There will be a huge change in the world of aviation through AI technology. Though artificial intelligence is still in its early stages, a number of changes in the aviation industry have already occurred. Crew management, flight management, ticketing, maintenance, and passenger identification are all applications focused on improving the customer experience. The aviation industry is currently exploring the use of Artificial Intelligence (AI) to automate certain aspects of flight operations, with the goal of increasing efficiency and safety. One of the main areas in which AI is being used is in the development of autonomous flight systems. These systems use sensors and other technologies to detect and respond to changes in the flight environment, and can be used to automate tasks such as take-off, landing, and navigation. This can help to reduce the

Emerging skills	Reasons for the requirement
	workload on pilots and improve the overall safety and efficiency of flight operations. Another area in which AI is being used is in the field of predictive maintenance. AI-powered systems can analyse data from aircraft systems to predict when maintenance will be needed, allowing airlines to schedule maintenance more efficiently and reduce the risk of downtime. AI is also being used to improve flight scheduling, by analysing data on weather, aircraft performance and other factors, to optimize flight routes, schedules, and flight plans. The use of AI in flight operations may lead to some changes in the role of pilots. In the future, pilots may take on a more supervisory role, monitoring the performance of autonomous systems and making decisions in the event of a system failure.
3. Drone programming and coding	Drones are increasingly becoming a part of the aviation industry, and with them come the need for new skills such as programming and coding. Drones require software to control their movements, and programming and coding skills are necessary to create and maintain the software. These technologies are used to help create highly automated and reliable drones that can be used for a variety of purposes, such as surveillance, agricultural monitoring, package delivery, and search and rescue operations. Coding and programming are essential in helping to create drones that can navigate obstacles and respond accurately to commands, while also maintaining safety protocols and operational efficiency.

Emerging skills	Reasons for the requirement
	Additionally, drones are becoming more and more capable of performing complex tasks, such as 3D mapping and autonomous navigation, which requires advanced coding and programming techniques. Furthermore, coding and programming are needed to ensure that drones are able to communicate with each other and with ground stations, as well as with other aircraft, in order to ensure safe and efficient flight operations.
4. Remote sensing and data analysis	Remote sensing and data analysis are becoming increasingly important skills in the world of aviation. With the development of digital technology, data analysis is becoming a vital tool in making informed decisions and increasing safety in the aviation industry. Remote sensing technologies, such as LiDAR, are allowing pilots to gain a better understanding of their environment, and to make better decisions in the air. As new technologies are developed, and more data is collected and analysed, data analysis skills will become even more important in aviation. Remote sensing and data analysis can help pilots identify potential hazards, and make more informed decisions to ensure safety. They can also help reduce fuel costs by providing more accurate data about wind and weather conditions. As the aviation industry continues to grow and evolve, having a good understanding of data analysis and remote sensing will be a valuable asset for pilots and air traffic controllers.

4.10 Issues and Challenges related to Air Transport

This section explores the common issues surrounding the Air Transport sector as illustrated in Figure 4.5.

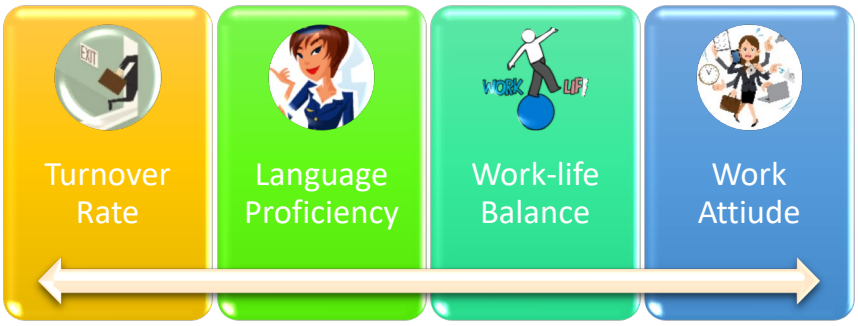

Figure 4. 5: Challenges Related to Air Transport

Feedback from the FGD is summarised below.

a. High turnover rate

The rate of attrition is considerably very high particularly among the cabin crews. This often caused by a combination of various factors deliberated as follows:

i. ***Maternity -*** After a while, most female cabin crew will want to start a family and retire early to care for their children.

ii. ***Competition -*** As more start-ups open for business and other airlines around the world expand their offerings to experienced cabin crew, they will have more options, contributing to the high turnover rate. This also applies to crew compensation. This becomes a money factor rather than a passion for the job.

iii. ***Flight schedule: Early starts and late finishes*** - Sleep deprivation has an impact on mental health. The majority of flight schedules depart and arrive early in the morning and late at night. This contributes to cabin crew physical fatigue and, in the long run, health problems.

iv. ***Highly regulated work environment -*** Authorities strictly regulate aviation and cabin operations, and cabin crew receive regulated training to ensure compliance throughout their airline careers. In the long run, this could lead to mental fatigue among the crew.

v. ***Job descriptions -*** Many potential cabin crew candidates are unfamiliar with cabin crew duties. On the surface, the cabin crew image has been exaggerated in order to glamourize the industry. The reality that a cabin crew faces on the job is far from glamorous, as the cabin crew job description is tedious and hectic.

vi. ***Remuneration -*** To reduce operating costs, more airlines are eliminating cabin crew perks and benefits. Pay grades have not increased to keep pace with inflation. This has resulted in an imbalance between the job tasks required and the monetary rewards. More cabin crew are becoming aware that a cabin crew position does not pay as well as it used to be.

b. Language proficiency

Culture is one of the factors influencing some cabin crew members' language proficiency, which affects their ability to understand certain aviation terminologies. Growing up in their own environment and only speaking in their native language, the failure to recognise the importance of English as a second language has had an impact on the quality of the cabin crew, as all aviation trainings required by state regulators will be conducted in English. This has been identified by instructors as one of the major challenges encountered while conducting training for new hire cabin crew.

Education has an impact on language proficiency as well. The general education system has not focused or emphasised the importance of English as an important language, which has unconsciously affected overall understanding and comprehension of the language in both written and spoken forms.

c. Work Life Balance

Work life balance essential because of mental health issues affecting employee's behaviour and performance.

i. **Impact to the employees**

- ***Working hours*** differ from the standard 0900H to 1800H because Cabin Crew and Flight Crew have an irregular schedule with long layovers during flights, including working on weekends and holidays. As a result, employees are spending less time at home with family, hence, mental illnesses such as depression and anxiety could be developed.
- ***Performances*** at work could be affected such as high medical leaves, disciplinary issues and complaints from passengers/colleagues which will delay their career progression.

- ***Prolonged sick leaves*** may affect employees financially.
- ***Poor decision making and situational awareness***, for example, becoming emotional, compromising safety on board of the aircraft.

ii. **Impact - Airlines**

- ***Additional cost*** to be spent on such as sending employees for counselling session that leads to unproductive manpower allocation if the employee is being grounded.
- ***Airline image*** will be at stake if complaints are received due to poor performance on board.
- ***Compromise in safety*** would lead to unwanted incidents and accidents, and sometimes incur cost to the company (deployment of slide, injury to passenger, disruptive passenger)

d. Work Attitude of the new generation workforce

Candidates applying for jobs, as well as those who are already employed, are having difficulty integrating into the company or workforce. This is due to the unavoidable generational shifts. As a rule, management in companies is made up of people from a different generation than those who are fresh out of school/college and looking for work. Employees of the new generation, for example, have an entitled attitude; they want something in return for doing something; they have a "what's in it for me" attitude. They appear to be lack of motivation, enthusiasm, and proactivity. They do not cope well with criticism or constructive corrective of behaviour by others, they seem to be very sensitive and reactive towards this.

Furthermore, many new generation candidates lack the mental and character toughness required for success in the real world. Job requirements of a cabin crew are more complicated and physically draining then what it is made out to be.

4.11 Mapping

The subsequent step is to map the existing NOSS with the OS. Currently, there are five (5) registered NOSS for Air Transport sector.

4.11.1 OS to Available NOSS

Table 4.12: Mapping Existing NOSS with OS (H511)

MSIC SECTION	**(H) STORAGE AND TRANSPORTATION**		
MSIC DIVISION	**(51) AIR TRANSPORT**		
MSIC GROUP	**(511) PASSENGER AIR TRANSPORT**		
AREA / LEVEL	**FLIGHT CREW**	**CABIN CREW**	**SAFETY ON-BOARD CABIN CREW**
LEVEL 8	Director of Flight Operations (DFO)	NJT	NJT
LEVEL 7	Designated Flight Examiner (DFE)	NJT	NJT
LEVEL 6	Flight Instructor (FI) / Ground Instructor	Assistant Manager Standards & Performance / Cabin Ops Manager / Asst Cabin Crew Manager	NJT
LEVEL 5	Captain	In-flight Supervisor Performance / Cabin Crew Executive / Purser Executive **In-flight Safety and Hospitality Management** **H522-004-5:2017** **(21-08-2017)**	Cabin Safety Inspector (CSI)
LEVEL 4	Senior First Officer (SFO)/First Officer (FO) / Co-Pilot	In-Charge Cabin Crew (ICC) Wide Body **In-Flight Safety and Hospitality Coordination** **H522-004-4:2017** **(21-08-2017)**	Line Checker / Cabin Safety Appraiser / Associate Instructor
LEVEL 3	Second Officer / Junior Co-Pilot	In-Charge Cabin Crew (ICC) Narrow Body **In-flight Services** **TP-077-3:2013** **(30-12-2013)**	NJT
LEVEL 2	NJT	Cabin Crew	NJT
LEVEL 1	NJT	Trainee Cabin Crew	NJT

Table 4.13: Mapping Existing NOSS with OS (H512)

MSIC SECTION	**(H) STORAGE AND TRANSPORTATION**	
MSIC DIVISION	**(51) AIR TRANSPORT**	
MSIC GROUP	**(512) FREIGHT AIR TRANSPORT**	
AREA / LEVEL	**UNMANNED AIRCRAFT SYSTEM (UAS) FLIGHT CREW**	**FREIGHT FLIGHT CREW**
LEVEL 8	NJT	Director of Flight Operations (DFO)
LEVEL 7	NJT	Designated Flight Examiner (DFE)
LEVEL 6	NJT	Flight Instructor (FI) / Ground Instructor
LEVEL 5	Flight Operation Manager (FOM)	Captain
LEVEL 4	UAS Flight Administrator **Drone Mission Commanding** **H512-001-3:2019** **(30-01-2019)**	Senior First Officer (SFO)/First Officer (FO) / Co-Pilot
LEVEL 3	Remote UAS Pilot **Drone Piloting** **H512-001-2:2019** **(30-01-2019)**	Second Officer/Junior Co-Pilot
LEVEL 2	Unmanned Aircraft System Crew / Payloader / Visual Observer (VO)	NJT
LEVEL 1	NJT	NJT

NJT – No Job Title

4.12 Conclusion

This chapter discussed the research findings based on document review, face-to-face interviews, observations as well as discussions with the industry representatives via Focus Group Discussion (FGD). Among the major delivery of the findings include the identification of the Occupational Structure (OS) and Occupational Responsibilities (OR) for the Air Transport sector. The OS and OR not only provide information on the occupation competency, job areas applicable, and skill level based on MOSQF level descriptors, but they also reflect the possible career paths within the Air Transport sector. The jobs and skills in demand as well as the critical job titles were proposed. Discussion on the issues and challenges of the sector was also included. Subsequently, the mapping of OS to the available NOSS was presented.

The next and final chapter 5 will further explain on the discussions, recommendations and conclusion based on the overall findings of this OF.

CHAPTER V

DISCUSSION, RECOMMENDATIONS AND CONCLUSION

5.1 Discussion

This chapter provides an insight into the discussion of the findings obtained throughout the development of the Occupational Framework for the Air Transport sector. Overall, there are 5 job areas identified under the Division H51 of MSIC 2008. In summary, there are 24 job titles, 6 critical job titles and all 24 job titles are relevant to the technology and industrial revolution. Mapping of Occupational Structure (OS) to the available National Occupational Skills Standard (NOSS) is also presented. To date, there have been five (5) NOSS developed for the Air Transport sector.

The research has accomplished all the research objectives as discussed thoroughly in Chapter 4 and to be concluded in this chapter.

5.1.1 Objective 1: Occupational Structure (OS)

To identify job titles and relevant competency level to establish Occupational Structure (OS) for the Air Transport Sector Based on the MSIC 2008.

The findings revealed for H511, a total of 3 job areas and H512 there are 2 job areas, with overall 24 job titles identified through face-to-face interview sessions with the industry representatives and validated through Focus Group Discussions (FGD). In the OS, the job titles are marked if they are either a critical job or a job relevant to the technology and industrial revolution or both. The completed OS is presented in Table 4.3 and Table 4.5 in chapter 4 above.

5.1.2 Objective 2: Occupational Responsibilities (OR)

To establish OR that outline the main activities and tasks for each job titles.

The OR describe the main duties of each of the job titles listed under the OS, which also corresponds with the particular job's respective area and level. The OR listed in this section may include but are not limited to the OR within the Air Transport sector. The OR will serve as the

future reference for the development of the NOSS for the Air Transport occupation under the MSIC 2008, Division H51. The OR can be referred to in Table 4.7 to Table 4.8 in chapter 4 above.

5.1.3 Objective 3: Occupational Descriptions (OD)

To establish OD for each job titles in demand based on the proposed OS for the Air Transport sector.

The OD for all job titles were obtained from the face-to-face interviews and related documents analysis. These OD will serve as the main reference for the development of the NOSS which will focus on the detail of required competencies for all job scopes. The OD can be referred to in **Annex 2 Occupational Description.**

5.1.4 Objective 4: Critical Jobs Titles

To identify critical jobs titles in the Air Transport sector.

The critical job titles were derived from the list of jobs in demand. Based on the FGD, the following are the six (6) critical job titles for the Air Transport sector:

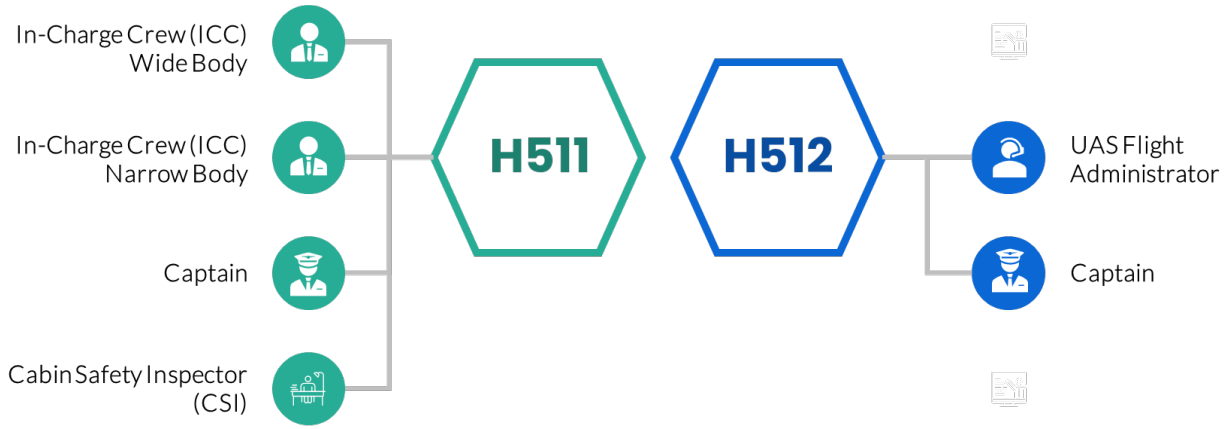

Figure 5. 1: Identified Critical Job Titles

5.1.5 Objective 5: Competency in Demand

To identify the competency in demand in the Air Transport Sector.

Through the FGD and analysis of relevant documents, the skills in demand for the industry are divided into three (3) as follows:

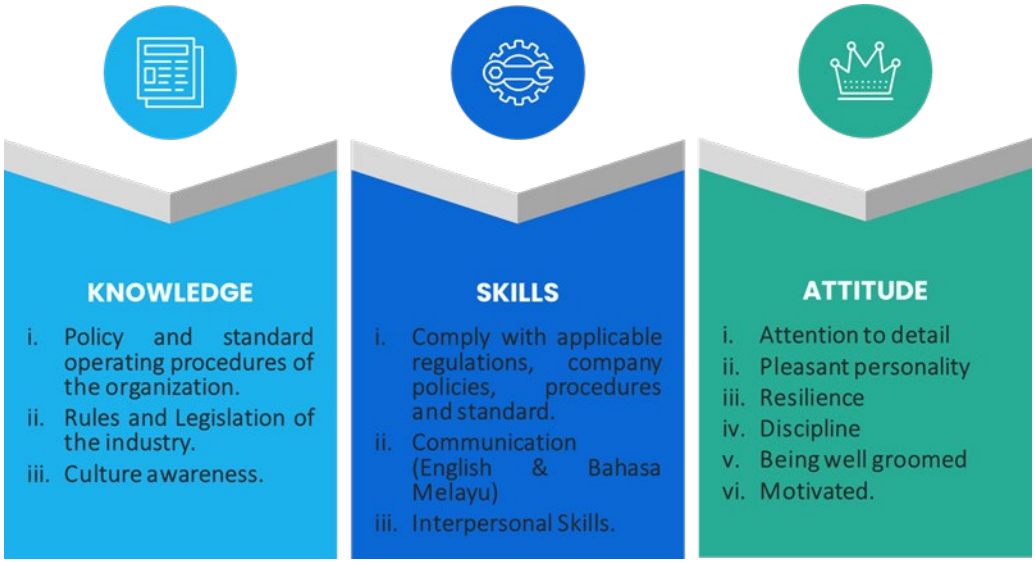

Figure 5.2: Competency in Demand

The set of competencies listed above is particularly relevant and imperative to the nature of the job in this industry. However, the level of importance and relevancy of each element varies based on the occupational level and job titles. Also, the competencies are additional to the functional competencies required for a particular job title.

5.1.6 Objective 6: Job Titles Related to the Technology, Industrial Revolution and Emerging Skills

To Propose job titles related to the technology and industrial revolution as well as the emerging skills for the Air Transport Sector.

According to the FGD, the industrial revolution is important to the aviation industry as a whole but less impact on the area of cabin crew. However, employees are expected to be IT literate and competent at the fundamental skill level, such as using E-mail and being familiar with various social media platforms such as websites, Facebook, and Instagram. This is because the majority of information has been communicated not only through face-to-face meetings but also through digital means. Nonetheless, the industry is still heavily reliant on manpower because human interactions are still the priority in serving customers, and technological advancement plays a role in improving the customer experience.

On the other hand, for other job areas like Flight Crew and Unmanned Aircraft System Flight Crew, the adoption of technology is growing and becoming more salient.

The following are the elements of technology relevant to the occupation under H511 and H512:

a) Internet of Things;
b) System Integration;
c) Cloud Computing;
d) Big Data;
e) Cyber-security;
f) Autonomous Robot;
g) Simulation; and
h) Augmented Reality.

The element of technology and industrial revolution is listed in **Table 4.10: Elements of Technology & Industrial Revolution Relevant to Passenger Air Transport and Freight Air Transport**.

In terms of emerging skills, it has been discovered that airlines are embracing technology and exploring the possibility of being automated in flight operations, particularly through the use of artificial intelligence. Aside from that, advanced technology such as remote sensing, which aids in making informed decisions to ensure safety, is becoming a valuable skill under the Unmanned Aircraft System

5.2 Recommendations

The outcome of this OF will be used as a reference for future plans of developing skilled personnel and certifying Malaysians in this sector in order to improve the quality of the local sector and thus boost Malaysia's global competitiveness. When it comes to addressing or mitigating workforce demand and supply, there are several options. It may include establishing and maintaining partnerships with other agencies or departments, as well as educational institutions, in order to increase external talent pools, as well as training existing staff to meet new skill requirements.

Based on the above comments, specific recommendations are listed below:

a) To continue and streamline NOSS development efforts for sectors in accordance with the findings of this analysis. This includes the creation of NOSS for sectors and sub-sectors that are in high demand but have yet to be developed. Only five (5) NOSS are currently available, as indicated by the mapping of OF to NOSS. Following the identification of the critical job titles, it is found that the job title as "Captain" is in demand and short in supply due to the training needs and flying hours requirement. Therefore, it is suggested that NOSS for job title "Captain" to be developed for the commercial airlines sector.

   On a different note, the current NOSS (H522-004-5:2017) for Cabin Crew area is mapped at Level 4 and Level 5 respectively. Based on the OR and referring to the level descriptors of MOSQF, the job titles assume the same complexity of work activities and required the same level of expertise. However, the level of autonomy and leadership responsibility differs between job title in level 4 and level 5. Hence, it is recommended that for the current NOSS to be revised accordingly to accommodate the distinct dimensions of MOSQF competency level, ie; complexity, expertise and autonomy.

b) To compliment Malaysia Standard Classification of Occupation (MASCO) with the additional job titles in the Air Transport;

c) To continuously promote the use of this OF by industry players in order to effectively improve the career structure of their employees.

5.3 Limitation

Several limitations were encountered during the development of this OF. Noteworthy was the availability of the organizations' representatives during the interviews and discussions as they were scheduled to fly regularly and it was quite cumbersome to get their available time for the session. On top of that, this particular industry is highly regulated and most of the job responsibilities were determined by the safety policies regulated by the authorities. Data were mainly classified as 'Private and Confidential' by the participative organisations was another limitation identified during the course of the research.

5.4 Conclusion

In conclusion, the Occupational Framework is a document that contains a) the Occupational Structure that indicates the job areas, job titles at different levels, classified following the Malaysia Occupational Standard Qualification Framework (MOSQF) Level Descriptors, and b) Occupational Descriptions (OD), c) Occupational Responsibilities (OR) and the Competency set. This document also highlights the job and competency in demand, critical jobs, emerging skills as well as jobs relevant to the industrial revolution. In addition, the challenges impacting the industry are also discussed. The findings are obtained through various research methods including document analysis, face-to-face interviews, FGD with the industry experts and non-participatory observation. The data were analysed through content analysis. The document will be the main reference in the development of the NOSS and in updating MASCO.

REFERENCES

Abutabenjeh, S., & Jaradat, R. (2018). Clarification of research design, research methods, and research methodology: A guide for public administration researchers and practitioners. Teaching Public Administration, 36(3), 237–258.

Auger, P. (2017). Information sources in grey literature. De Gruyter Saur.

Berg, B. L., Lune, H., & Lune, H. (2012). Qualitative research methods for the social sciences (Vol. 8). Boston, MA: Pearson.

Braun, V., & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. Sage

Bryman, A., & Buchanan, D. A. (Eds.). (2018). Unconventional methodology in organization and management research. Oxford University Press.

Cohen, L., Manion, D., & Morrison, K. (2007). Research methods in Education. New York: Rutledge.

Department of Statistics Malaysia. (2008). Malaysia Standard Industrial Classification (MSIC) 2008 . https:/ / www.DOSM.gov.my/ v1/ uploads/ files/ 4_Portalper cent20Content/ 3_Methodsper cent20per cent26per cent20Classifications/ 2_Listper cent20ofper cent20References/ MSIC_2008.pdf

Department of Skills Development (2020), Occupational Framework (OF) Guideline. Edition 2020

Department of Skills Development (2020), National Occupational Skills Standard (NOSS) Guideline. Edition 2020

Department Statistic of Malaysia, Employment Statistic (2021), 1st Quarter 2021.

Department of Skills Development, Malaysia, Malaysian Occupational Skills Qualification Framework (MOSQF) Level Descriptor,

Department Of Statistic Malaysia (DOSM) (2021), Principal Statistic of Labour Force, Malaysia Labour Force Survey report 2021.

Economic Planning Unit, Prime Minister's Department Malaysia. (2021). Malaysia Digital Economy Blueprint. https:/ / www.epu.gov.my/ sites/ default/ files/ 2021-02/ malaysia-digital-economy-blueprint.pdf

Economic Planning Unit, Prime Minister's Department Malaysia. (2021b). National Fourth

Industrial Revolution (4IR) Policy. https:/ / www.epu.gov.my/ sites/ default/ files/ 2021-07/ National-4IR-Policy.pdf

Garousi, V., Felderer, M., & Mäntylä, M. V. (2019). Guidelines for including grey literature and conducting multivocal literature reviews in software engineering. Information and Software Technology, 106, 101-121

Gibbert, M., & Ruigrok, W. (2010). The ‘‘what’’and ‘‘how’’of case study rigor: Three strategies based on published work. *Organizational research methods*, *13*(4), 710-737.

Hoeber, O., Hoeber, L., Snelgrove, R., & Wood, L. (2017). Interactively Producing Purposive Samples for Qualitative Research using Exploratory Search. In *SCST@ CHIIR* (pp. 18-20).

HRD Fund, Annual Report (2016), THINK Different, Edition 2016

International Air Transport Association (IATA) Annual Review (2017)

Johnson, B., & Christensen, L. (2000). *Educational research: Quantitative and qualitative approaches*. Allyn & Bacon.

Lankshear, C., & Knobel, M. (2004). *A handbook for teacher research*. McGraw-Hill Education (UK).

Machi, L. A., & McEvoy, B. T. (2012). The literature review: Six steps to success. Corwin Press.

Magilvy, J. K., & Thomas, E. (2009). A first qualitative project: Qualitative descriptive design for novice researchers. *Journal for Specialists in Pediatric nursing*, *14*(4), 298-300.

Malaysia Standard Classification of Occupation (MASCO) (2020), Ministry of Human Resources.

Malaysia Third Industrial Master Plan from 2005 to 2016, (IMP3) (2016), MITI, Edition 2016.

Malaysia Qualification Framework (MQF) 2nd Edition, 2017

Ministry of Human Resources Malaysia. (2020). Malaysia Standard Classification of Occupations (MASCO) 2020. https:/ / www.mohr.gov.my/ pdf/ masco/ MASCO_2020_BI_Edaran.pdf

Ministry of Human Resources Malaysia. (n.d.). Senarai NOSS. MySPIKE. https:/ / www.myspike.my/ index.php?r=umum-nossper cent2Findex-noss

Ministry of International Trade and Industry(2020), The 9 Pillars of Industrial Revolution (2020)

MyFutureJobs (Ministry of Human Resources Malaysia)

MySPIKE (Ministry of Human Resources Malaysia)

Neal, J. W., Neal, Z. P., VanDyke, E., & Kornbluh, M. (2015). Expediting the analysis of qualitative data in evaluation: A procedure for the rapid identification of themes from audio recordings (RITA). *American Journal of Evaluation*, *36*(1), 118-132.

Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work*, *1*(3), 261-283.

Robson, C. (2002) Real World Research, 2nd Edition, Oxford: Blackwell.

Roscoe, J.T. (1975) Fundamental Research Statistics for the Behavioral Science, International Series in Decision Process, 2nd Edition, Holt, Rinehart and Winston, Inc., New York.

Roulston, K., & Choi, M. (2018). Qualitative interviews. *The SAGE handbook of qualitative data collection*, 233-249.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.

The Sundaily (2021). www.thesundaily.my/local/challenges-for-malysia-airlines

Tretheway, M. W., & Markhvida, K. (2014). The aviation value chain: Economic returns and policy issues. *Journal of Air Transport Management*, *41*, 3-16.

Thomas, D. R. (2003). A general inductive approach for qualitative data analysis.

Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, *8*(3), 238-264.

Wellington, J. (2015). *Educational research: Contemporary issues and practical approaches*. Bloomsbury Publishing.

Yin, 2018, Case Study Research and Applications: design and Method (6th ed.) Thousand Oaks, CA: SAGE

ANNEX 1: LIST OF CONTRIBUTORS

H51 – AIR TRANSPORTATION OCCUPATIONAL FRAMEWORK DEVELOPMENT COMMITTEE

RESEARCHERS

NO.	NAME	POSITION	ORGANISATION
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5	Nik Azahar Nik Ibrahim	Quality Assurance Manager	Capital A Berhad (Air Asia)
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3	En. Nazrul Hilmi bin Mohammad	Senior Assistant Director

ANNEX 2: OCCUPATIONAL DESCRIPTION (OD)

SECTION : (H) TRANSPORTATION AND STORAGE

DIVISION : (51) AIR TRANSPORT

GROUP : (511) PASSENGER AIR TRANSPORT

(512) FREIGHT AIR TRANSPORT

MSIC SECTION : H - Transportation and Storage
MSIC DIVISION : H51 – Air Transport
MSIC GROUP : H511 – Passenger Air Transport
AREA : Flight Crew
JOB TITLE : Director of Flight Operations (DFO)
LEVEL : Level 8

RESPONSIBILITIES:

1. An active Pilot with the status of Pilot in Command (PIC) responsible to lead the Flight Operations Department effectively in accordance with regulatory, company, ICAO and IOSA requirements, and ensure continuous compliance to all applicable CAAM and International regulations and standards.
2. Responsible for developing, implementing and following up on aircraft operations related projects that will enhance safety, optimize operation, reduce operating cost and preserve the company's contractual rights.
3. The management of safety risk and security threats to aircraft operations.
4. Call for a hearing in case of accident or incident or whenever he deems it as necessary in case of irregularity.
5. Overlook safety, training and development of the flight crew members and ensuring that all necessary certifications are up to date.
6. Operations are conducted in accordance with conditions and restrictions of the Air Operator Certificate (AOC) and in compliance with applicable regulations and standards of the company.

KNOWLEDGE:

1. Acquire comprehensive knowledge of the CAA 1969, MCAR 2016 and any associated requirements and procedures, operations specifications, operations manuals (OMs) and Safety Management System.
2. Proficient with the airline's Operations Manual requirements.
3. To show competency in Area, Route and Aerodrome operated by the airline.
4. Good cultural awareness.

SKILLS:

1. Well-developed interpersonal skills.
2. Good analytical skills.
3. Possess good leadership skills.
4. Possess good customer service and public relations skills.
5. Excellent commercial awareness.
6. Strong problem-solving skills.
7. Good decision-making skills.
8. Strong planning and organizational skills.
9. Strong negotiation and persuasion skills.
10. Comply with applicable regulations as well as company policies, procedures and standards.

ATTRIBUTES (ATTITUDE):

1. Passion for aviation and flight operations.
2. Strong integrity and ethical values.
3. Able to represent the Company in a professional manner.
4. Strong team work and collaboration.
5. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
6. Attention to detail.
7. Pleasant personality.
8. Resilience.
9. Discipline.
10. Being well groomed.
11. Highly motivated.

REGULATORY REQUIREMENTS:

1. Hold the license and rating necessary to act as the aircraft's pilot in command (PIC) on which the instruction is given.

2. Hold at least the license and aircraft type rating for which instruction is being given in the appropriate category.
3. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.
4. Acquire practical experience and expertise in the application of aviation safety standards and safe operating practices.
5. Minimum 5 years management working experience at which 2 years should be from an aviation industry in an appropriate position.
6. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.

MSIC SECTION : H - Transportation and Storage
MSIC DIVISION : H51 – Air Transport
MSIC GROUP : H511 – Passenger Air Transport
AREA : Flight Crew
JOB TITLE : Designated Flight Examiner (DFE)
LEVEL : Level 7

RESPONSIBILITIES:

1. Ensure the standards of the flight crews as required by the regulatory and company requirements.
2. To conduct training and checking as per the Operations Manual requirements.
3. To remain impartial and record only factual observations made during checks and training.
4. To ensure that safety is assured at all times in the aircraft and simulator.
5. Development of content and method of training.
6. Quality control by ensuring a uniform standard of grading and assessment.
7. Ensure of a high standard of all flight crew released from the Training Section.
8. Ensure approved methods of training are used.
9. Identification of non-standard methodologies.
10. Instructor training, monitoring and checking.
11. Analyse of poor progress and failures recommendation of courses of remedial training.
12. Conduct skill tests for the issue of type ratings for multi-pilot aircraft.
13. To evaluate and decide on the performance of the candidates during checks and training.
14. To intervene and cease training and/or checking when the candidate or situation is not suitable to proceed.
15. To take over as Pilot in Command (PIC) of the flight in the interest of safety and legality when the situation arises and accounts for it.
16. Demonstrate flying proficiency in the aircraft type to which the nominee seeks checking/ training authority.

KNOWLEDGE:

1. Comprehensive knowledge of the MCAR 2016, CAD 1 and CAD 1006 and any associated requirements and procedures, operations specifications, operations manuals (OMs) and Safety Management System.
2. Possess thorough knowledge of the Company's Operations Manual, Operating Specifications, Standard Operating Procedure (SOP) and applicable aircraft flight and operating manuals.
3. Acquire technical theoretical knowledge in aviation.
4. Good cultural awareness.

SKILLS:

1. Well-developed interpersonal skills.
2. Excellent communication skills.
3. Organizational ability.
4. Good analytical skills.
5. Possess a good leadership skill.
6. Possess good customer service and public relations skills.
7. Commercial awareness.
8. Comply with applicable regulations as well as company policies, procedures and standards.
9. Demonstrate key instructional and communication skills to teach.

ATTRIBUTES (ATTITUDE):

1. Analytical and alert to student's needs.
2. Attention to detail.
3. High level of discipline and able to perform and setting good examples.
4. Motivator.
5. Calm and thoughtful.
6. Pleasant personality.
7. Look for opportunities to improve own qualifications, effectiveness and service/standards level.
8. Acquire a respected level of maturity.

9. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
10. Being well groomed.
11. Highly motivated.

REGULATORY REQUIREMENTS:

1. Hold the license and rating necessary to act as the aircraft's pilot in command (PIC) on which the instruction is given.
2. Hold at least the license and aircraft type rating for which instruction is being given in the appropriate category
3. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.

MSIC SECTION : H - Transportation and Storage
MSIC DIVISION : H51 – Air Transport
MSIC GROUP : H511 – Passenger Air Transport
AREA : Flight Crew (FI)
JOB TITLE : Flight Instructor / Ground Instructor
LEVEL : Level 6

RESPONSIBILITIES:

1. To uphold the high standards of all flight crews as required by the regulatory bodies and the airline.
2. To conduct training and checking as per the Operations Manual requirements.
3. Development of content and method of training.
4. Development of training documentation.
5. Development of training projects.
6. Development of section input for operational SOPs.
7. Quality control by ensuring a uniform standard of grading and assessment.
8. Maintenance of a high standard of all flight crew released from the Training Section.
9. Ensuring approved methods of training are used.
10. Identification of non-standard methodologies.
11. Instructor training, monitoring and checking.
12. Analysis of poor progress and failures recommendation of courses of remedial training.
13. Give flight instruction for the issue of a type rating including Crew Resource Management (CRM) training in the appropriate category and multi crew cooperation.
14. To remain impartial and record only factual observations made during checks and training.
15. To ensure that safety is assured at all times in the aircraft and simulator.
16. Conduct of line checks.
17. To evaluate and decide on the performance of the candidates during checks and training.
18. To intervene and cease training and/or checking when the candidate or situation is not suitable to proceed.

19. To take over as Pilot in Command (PIC) of the flight in the interest of safety and legality when the situation arises and accounts for it.
20. Demonstrate flying proficiency in the aircraft type to which the nominee seeks checking/ training authority.

KNOWLEDGE:

1. Comprehensive knowledge of the MCAR 2016, CAD 1 and CAD 1006 and any associated requirements and procedures, operations specifications, operations manuals (OMs) and Safety Management System.
2. Demonstrate thorough knowledge of the Company's Operations Manual, Operating Specifications, Standard Operating Procedure (SOP) and applicable aircraft flight and operating manuals.
3. Good cultural awareness.
4. Demonstrate technical theoretical knowledge in aviation.

SKILLS:

1. Well-developed interpersonal skills.
2. Comply with applicable regulations as well as company policies, procedures and standards.
3. Organizational ability.
4. Good analytical skills.
5. Excellent leadership skills.
6. Possess good customer service and public relations skills.
7. Commercial awareness.
8. Demonstrate key instructional and communication skills to teach.

ATTRIBUTES (ATTITUDE):

1. Passion to teach and help others.
2. Pleasant personality.
3. Sincere and able to admit errors.
4. High level of discipline and able to perform and setting good examples.
5. Well groomed.
6. Attention to detail.

7. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
8. Receptive toward critical feedback.
9. Highly motivated.

REGULATORY REQUIREMENTS:

1. Hold the license and rating necessary to act as the pilot in command (PIC) of the aircraft on which the instruction is given.
2. Hold at least the license and aircraft type rating for which instruction is being given in the appropriate category.
3. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.

MSIC SECTION : H - Transportation and Storage
MSIC DIVISION : H51 – Air Transport
MSIC GROUP : H511 – Passenger Air Transport
AREA : Flight Crew
JOB TITLE : Captain
LEVEL : Level 5

RESPONSIBILITIES:

Prior to Flight:

1. Responsible for the safety of aircraft, its occupants and cargo begin from the time he takes control of the aircraft and ends when he hands over the aircraft to the authorized ground personnel or the next flight crew taking charge or when the aircraft is parked, locked and sealed.
2. Ensure that the pre-flight inspection has been carried out, and decide whether or not to accept the aircraft with unserviceability allowed by the Configuration Differential List (CDL) or Minimum Equipment Lists (MEL).
3. Ensure the FO's (First Officer)/Co-Pilot required documents are carried and valid.
4. Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base.
5. Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS.
6. Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan.
7. Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy.
8. Ascertain that the FOB (Fuel on Board) is sufficient and suitable for the safe conduct of the flight.
9. Make all reasonable steps to ensure that the airplane mass and balance is within the calculated limits for the operating conditions.

10. Be familiar and ensure compliance with the laws, regulations and procedures of those States where operations are conducted.
11. Providing the operations section with complete and up-to-date information as to the movement and serviceability of his aircraft.

In Flight:

1. Be responsible for the operation of the aircraft in accordance with the rules of the air, except that the captain may depart from these rules in circumstances that render such departure absolutely necessary in the interest of safety.
2. Be responsible for the safety of all crew members, passengers and cargo on board, as soon as he arrives on board, until he leaves the airplane at the end of the flight.
3. His decisions must give absolute priority of safety, and have due regard for legality, economy, passenger comfort and adherence to schedule.
4. To carry out duties in accordance with the SOP (Standard Operating Procedures) and Operations Manual, including procedures, limitations and performance.
5. Safely and properly conduct the flight in compliance with the current flight plan.
6. Monitoring flight progress and aircraft systems and observe surrounding environment and performance of other crew.
7. Inform ATC of any aircraft or vessel in distress or requiring assistance and rendering any assistance of which he is capable without endangering the safety of his own aircraft or its occupants.
8. Report all cases of infectious disease on board to the medical authorities. Record the details of any birth, death on board, on the incident / occurrence report form provided or, in its absence, the voyage report.

KNOWLEDGE:

1. Proficient with the airline's Operations Manual, policies, procedures and standards related to the job function.
2. To show competency in Area, Route and Aerodrome operated by the airline.
3. Proficient in oral and written English.
4. To show proficiency in aviation theory and knowledge and successfully completed the Aircraft Type Rating course.

5. Good cultural awareness.

SKILLS (General):

1. Well-developed interpersonal skills.
2. The ability to communicate to all levels, both inside and outside of the organization.
3. Organizational ability.
4. Good analytical skills.
5. Strong leadership skills.
6. Possess good customer service and public relations skills.
7. Comply with applicable regulations as well as company policies, procedures and standards.
8. Commercial awareness.

ATTRIBUTES (ATTITUDE):

1. Friendly, mature, humble, honest, meticulous, self-starter.
2. Ability to maintain high confidentiality, tactful and discretion when dealing with people.
3. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
4. Being well groomed.
5. Highly motivated.

REGULATORY REQUIREMENTS:

1. A valid CAAM ATPL with valid instrument and type rating.
2. A valid CAAM medical certificate (class 1)
3. A validation certificate/license from CAAM (foreign license holder).
4. Proficient in oral and written English (English Language Proficiency of level 4).
6. To show proficiency and successfully pass the Annual Line Check, License Proficiency Check (LPC), Operator's Proficiency Check (OPC) and Aviation related examinations.
7. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.

MSIC SECTION : H - Transportation and Storage
MSIC DIVISION : H51 – Air Transport
MSIC GROUP : H511 – Passenger Air Transport
AREA : Flight Crew
JOB TITLE : First Officer (FO)/Senior First Officer (SFO)
LEVEL : Level 4

RESPONSIBILITIES:

Prior to Flight:

1. Ensure the PIC's (Pilot in Command) required documents are carried and valid.
2. Participate in the preparation of the flight and to attentively monitor its progress in order to be able to assume the authority/responsibility at any given time.
3. Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base.
4. Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS.
5. Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan.
6. Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy.
7. Ascertain that the FOB (Fuel on Board) is sufficient for the safe conduct of the flight.
8. To ensure that a pre-flight inspection is carried out prior to each flight.
9. Participates in the Captain's crew briefing and make himself aware of all relevant aeronautical and meteorological information as well as the relevant papers documenting the aircraft technical status and its anticipated load.

In Flight:

1. Executes tasks and functions as the PF (Pilot Flying) of PM (Pilot Monitoring), as delegated by the PIC.
2. To carry out duties in accordance with the SOP (Standard Operating Procedures), including procedures, limitations and performance, as directed by the PIC.

3. Safely and properly conduct the flight in compliance with the current flight plan and PIC instructions.
4. Maintaining a record of flight progress, including ATC (Air Traffic Control) clearances, altimeter settings/readings, meteorology reports, etc on the OFP.
5. Draws the attention of the PIC on any condition or circumstances that may impair the safety of the flight.
6. Assisting the PIC in the management of the flight deck.
7. Monitoring flight progress and aircraft systems and observe surrounding environment and performance of another crew.
8. In-flight, the Co-Pilot, as directed by the Commander executes the tasks and functions of either the PF or PNF.
9. Assist the Commander in the management of the flight deck work by observing a well-balanced task distribution systematic co-operation and exchange of information, monitoring the flight progress and the aircraft systems and observing the airspace and the performance of other Flight deck crew members.
10. Deals with all documents that have to be completed (e.g., Operational Flight Plan, occurrence reports, Voyage Report & etc).
11. After completion of the flight, the Co-pilot assists the Commander in completing the aircraft documentation, leaving the flight deck clean and tidy for the next flight crew, handing over the aircraft to the next flight crew taking charge or to the authorized ground personnel or in absence of an engineer or responsible person, having the aircraft secured and handing over the completed documentation to authorized personnel or forwarding such documents by other means.
12. If the Commander becomes incapacitated, the Co-Pilot assumes the Commander's authority and responsibility for the aircraft, crew, passengers and cargo.

KNOWLEDGE:

1. Proficient with the airline's Operations Manual, policies, procedures and standards related to the job function.
2. To show competency in Area, Route and Aerodrome operated by the airline.
3. Proficient in oral and written English.

4. To show proficiency in aviation theory and knowledge and successfully completed the Aircraft Type Rating course.
5. Good cultural awareness.

SKILLS:

1. Well-developed interpersonal skills.
2. Organizational ability.
3. Good analytical skills and leadership skills.
4. Possess good customer service and public relations skills.
5. Commercial awareness.
6. Comply with applicable regulations as well as company policies, procedures and standards.
7. Able to safely operate the aircraft without guidance.

ATTRIBUTES (ATTITUDE):

1. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
2. Friendly, mature, humble, honest, meticulous, self-starter.
3. Being well groomed.
4. Highly motivated.
5. Ability to maintain high confidentiality, tactful and discretion when dealing with people.

REGULATORY REQUIREMENTS:

1. Hold a valid Malaysian ATPL with valid instrument and type rating or hold a valid Malaysian CPL/IR with Frozen ATPL or equivalent ICAO recognised licence.
2. Hold a valid CAAM medical certificate (Class 1)
3. Minimum English Language Proficiency of level 4 (ICAO)
4. To show proficiency and successfully pass the Annual Line Check, License Proficiency Check (LPC), Operator’s Proficiency Check (OPC) and Aviation related examinations.
5. Having passed all tests and checks.

MSIC SECTION : H - Transportation and Storage

MSIC DIVISION : H51 – Air Transport

MSIC GROUP : H511 – Passenger Air Transport

AREA : Flight Crew

JOB TITLE : Second Officer (SO)/Junior Co-Pilot

LEVEL : Level 3

RESPONSIBILITIES:

Prior to Flight:

1. Ensure the PIC's (Pilot in Command) required documents (license, passport, attestation certificate, etc) are carried and valid.
2. Participate in the preparation of the flight and to attentively monitor its progress in order to be able to assume the authority/responsibility at any given time.
3. Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base.
4. Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS.
5. Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan.
6. Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy.
7. Ascertain that the FOB (Fuel on Board) is sufficient for the safe conduct of the flight.
8. To ensure that a pre-flight inspection is carried out prior to each flight.
9. If the Commander becomes incapacitated, the Co-Pilot assumes the Commander's authority and responsibility for the aircraft, crew, passengers and cargo.
10. Participates in the Commander's crew briefing and make himself aware of all relevant aeronautical and meteorological information as well as the relevant papers documenting the aircraft technical status and its anticipated load.

In Flight:

1. Executes tasks and functions as the PF (Pilot Flying) of PM (Pilot Monitoring), as delegated by the PIC.
2. To carry out duties in accordance with the SOP (Standard Operating Procedures), including procedures, limitations and performance, as directed by the PIC.
3. Safely and properly conduct the flight in compliance with the current flight plan and PIC instructions.
4. Maintaining a record of flight progress, including ATC (Air Traffic Control) clearances, altimeter settings/readings, meteorology reports, etc on the OFP.
5. Draws the attention of the PIC on any condition or circumstances that may impair the safety of the flight.
6. Assisting the PIC in the management of the flight deck.
7. Monitoring flight progress and aircraft systems and observe surrounding environment and performance of other crews.
8. In-flight, the Co-Pilot, as directed by the Commander executes the tasks and functions of either the PF or PNF.
9. Assist the Commander in the management of the flight deck work by observing a well-balanced task distribution systematic co-operation and exchange of information, monitoring the flight progress and the aircraft systems and observing the airspace and the performance of other Flight deck crew members.
10. Deals with all documents that have to be completed (e.g., Operational Flight Plan, occurrence reports, Voyage Report & etc).
11. After completion of the flight, the Co-pilot assists the Commander in completing the aircraft documentation, leaving the flight deck clean and tidy for the next flight crew, handing over the aircraft to the next flight crew taking charge or to the authorized ground personnel or in absence of an engineer or responsible person, having the aircraft secured and handing over the completed documentation to authorized personnel or forwarding such documents by other means.

KNOWLEDGE:

1. Proficient with the airline's Operations Manual, policies, procedures and standards related to the job function.
2. To show competency in Area, Route and Aerodrome operated by the airline.
3. Proficient in oral and written English.
4. To show proficiency in aviation theory and knowledge and successfully completed the Aircraft Type Rating course.
5. Good cultural awareness.

SKILLS:

1. Well-developed interpersonal skills.
2. Organizational ability.
3. Good analytical skills and leadership skills.
4. Possess good customer service and public relations skills.
5. Commercial awareness.
6. Comply with applicable regulations as well as company policies, procedures and standards.
7. Able to safely operate the aircraft without guidance.

ATTRIBUTES (ATTITUDE):

1. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
2. Friendly, mature, humble, honest, meticulous, self-starter.
3. Being well groomed.
4. Highly motivated.
5. Ability to maintain high confidentiality, tactful and discretion when dealing with people.

REGULATORY REQUIREMENTS:

1. Hold a valid Malaysian ATPL with valid instrument and type rating or hold a valid Malaysian CPL/IR with Frozen ATPL or equivalent ICAO recognised licence.
2. Hold a valid CAAM medical certificate (Class 1)
3. Minimum English Language Proficiency of level 4 (ICAO)

4. To show proficiency and successfully pass the Annual Line Check, License Proficiency Check (LPC), Operator's Proficiency Check (OPC) and Aviation related examinations.
5. Having passed all tests and checks.

MSIC SECTION	**:**	**H - Transportation and Storage**
MSIC DIVISION	**:**	**H51 – Air Transport**
MSIC GROUP	**:**	**H511 – Passenger Air Transport**
AREA	**:**	**Cabin Crew**
JOB TITLE	**:**	**Cabin Operations Manager**
LEVEL	**:**	**Level 6**

RESPONSIBILITIES:

1. Is responsible to the Head of Cabin Crew in supervising Operations of the Department and to ensure Cabin Crew comply and strictly adhere to stipulated Company policies and Regulatory Standards expected of the company.
2. To manage and control Cabin Crew Operations workforce, to ensure crew acquire knowledge and skills to deliver the highest level of Cabin Operations delivery to meet Corporate, Safety & Security Regulatory Standards expected of the Company.
3. Responsible in executing safety and operational related matters pertaining to Cabin Crew.
4. Report any accidents, incidents, events, or hazards that may adversely affect the safety of his/her department.
5. It is mandatory that all the duties, functions, responsibilities, and activities assigned or delegated are to be conducted in accordance with the Regulatory and Company requirements and standards.
6. Assist in the application of the AOC process.
7. Manual and Document creation.
8. Ensures Cabin Operations adherence to all applicable laws and regulatory requirements.
9. Ensures Cabin Operations coordinates, communicates and cooperate effectively through timely dissemination of information with regards to procedural, operations and equipment updates.
10. Responsible to ensure department OTP and investigate OTP Delays and report/resolve findings.
11. Provide assistance and support towards meeting safety performance targets.

12. To control overall discipline of Cabin Crew and take appropriate action on act/s of malpractice and or misconducts and Non-Conformance to stipulated grooming guidelines (i.e., overall appearance & weight).
13. Check, clear & reinstate Cabin Crew after Maternity, Long Term Absence due to Medical, long-term absence from approved leave, No Pay leave etc. in order to ensure standards of grooming requirements are met.
14. To develop, disseminate and update information to Cabin Crew pertaining to cabin operations, operational and station requirements on CIQ (Customs, Immigration and Quarantine) matter.
15. To investigate, counsel compliment, reprimand Cabin Crew resulting from customer compliments/complaints, Voyage Reports, and online performance related matters.
16. To conduct any disciplinary process resulting from misconduct and non- conformance.
17. Be responsible for the documentation and upkeep of the procedures under their control.
18. Monitor all reports and events to ensure adverse trends are tackled appropriately by department and on time.
19. Identify / rectify service breakages issues and to make appropriate and remedial recommendation on performance improvement.
20. Conduct Operations briefing for new & current Cabin Crew and basic classes.
21. Mentor, guide, and develop close rapport with Cabin Crew.
22. Contact point for Cabin Crew to verify Flight time Limitation (FTL), Safety Emergency Procedures (SEP) and requirements for irregular operations.
23. Represent Cabin Crew Department in Safety Review meetings.
24. To carry out In-Flight observation flights as and when required.
25. To ensure that the mandatory requirements of the Cabin Crew are current, renewed or obtained.
26. Collecting data and material for updates in the monthly Quality Improvement Forum.
27. These duties, responsibilities and activities may change, or new ones may be assigned at any time with or without notice by the Head of Cabin Crew.
28. To carry out and assist other duties as assigned by Head Cabin Crew.

KNOWLEDGE:

1. Holds a Degree with relevant qualification or
2. Holds a Diploma/STPM/SPM and/or have at least minimum of 7 years' experience in previous position.

3. Possess excellent knowledge, skills and working experience of airlines industry.
4. Excellent cultural awareness.
5. Knowledgeable of civil aviation policies, procedures and standards to job function.

SKILLS (General):

1. Comply with applicable regulations as well as company policies, procedures and standards.
2. Possess strong, visible, and supportive people management and leadership skills.
3. Good command of English and Bahasa Malaysia.
4. Excellent interpersonal skill.
5. Good decision-making skills.

ATTRIBUTES (ATTITUDE):

1. Agility / Flexibility to multi task.
2. Enthusiasm to progress and improve.
3. Emotionally intelligent.
4. Resilience.
5. Ability to work as a team.
6. Detailed oriented.
7. Integrity.
8. Professionalism.
9. Passion for continuous improvement and learning.
10. Being well groomed.
11. Pleasant personality.

MSIC SECTION	**:**	**H - Transportation and Storage**
MSIC DIVISION	**:**	**H51 – Air Transport**
MSIC GROUP	**:**	**H511 – Passenger Air Transport**
AREA	**:**	**Cabin Crew**
JOB TITLE	**:**	**Purser Executive**
LEVEL	**:**	**Level 5**

RESPONSIBILITIES:

1. Direct reporting line to Cabin Operations Manager.
2. Purser Executive is also responsible to the Head of Cabin Crew for ensuring that all Standard Operating Procedures (SOPs) and emergency procedures are performed by the Cabin Crew, in accordance with the operator's policies, procedures and SEP Manual.
3. Report any accidents, incidents, events, or hazards that may adversely affect the safety of his department.
4. Assist in operational tasks and duties at the office as per roster.
5. Supporting the achievement of safety performance targets.
6. Ensure high standards of in-flight service.
7. Manage, control and monitoring of Cabin Crew operations which covers:
   a) Safety and security.
   b) Standards Operating Procedure (SOP).
   c) On-time Performance (OTP).
   d) Consistent Achievement of set KPI.
   e) To counsel / brief / mentor Cabin Crew on board.
   f) Grooming.
8. To provide recommendations to improve Cabin Service Standards.
9. Purser Executives will be appointed to the Safety Quality Representative team and carry out delegated duties assigned by Safety & Quality when required.
10. Attend to reports received from Safety Quality or other reporting methods, assist in investigations and take corrective actions in a timely manner.

11. To develop cabin in-flight SOP's and guidelines and ensure in-flight policies are aligned with the Department.
12. To review and monitor non-compliance on in-flight procedures.
13. To ensure consistency on service delivering standards.
14. To update Cabin Crew Handbooks and relevant manuals.
15. To develop cabin in-flight SOP and guidelines.
16. To review passengers' complaints and provide recommendation for improvements.
17. To partake in any in-flight sustainability programs and ensure full implementation, execution, and monitoring.
18. Responsible for in-flight catering supplies and operations.
19. To conduct in-flight observation as and when required.
20. To ensure compliance of Cabin Crew to social media etiquette and ethics at all times.
21. To perform job functions as an ICC when rostered as one.
22. To assist in monitoring overall processing and action of Cabin Crew VR.
23. These duties, responsibilities and activities may change, or new ones may be assigned at any time with or without notice by the Head of Cabin Crew.
24. It is mandatory that all the above duties, functions, responsibilities and activities assigned or delegated are be conducted in accordance with the Regulatory and Company requirements and standards.
25. Other duties as assigned by Head of Cabin Crew and Cabin Operations Manager.

KNOWLEDGE:

1. Has at least 24 months of experience as operating cabin crew member, and
2. Has succesfully completed an In-Charge Cabin Crew Member training course and the associated check.
3. Demonstrate the understanding of civil aviation theory and knowledge.
4. Understand civil aviation regulations, directives and guidance as well as company policies, procedures and processes.
5. Excellent cultural awareness.

SKILLS:

1. Comply with applicable regulations as well as company policies, procedures and standards.
2. Good command of English and Bahasa Malaysia.
3. Excellent interpersonal skill.
4. Good decision-making skills.

ATTRIBUTES (ATTITUDE):

1. Agile and flexible to multi task.
2. Enthusiasm to progress and improve.
3. Emotionally intelligent.
4. Problem solving capacity.
5. Ability to work as a team.
6. Detailed oriented.
7. Integrity.
8. Being well groomed.
9. Passion for continuous improvement and learning.
10. KPI rating must be GOOD and above.
11. Good Safety knowledge.
12. No complaint received.
13. GOOD attendance records.
14. NO disciplinary issue.

MSIC SECTION	**:**	**H - Transportation and Storage**
MSIC DIVISION	**:**	**H51 – Air Transport**
MSIC GROUP	**:**	**H511 – Passenger Air Transport**
AREA	**:**	**Cabin Crew**
JOB TITLE	**:**	**In-Charge Cabin Crew (ICC) Widebody**
LEVEL	**:**	**Level 4**

RESPONSIBILITIES:

1. To participate and uphold the safety and security policies and procedures in line with the departments objectives.
2. Responsible to the PIC for the conduct, co-ordination and performance of the cabin procedures and safety standards, duties and functions applicable during normal operations, abnormal and emergency situations.
3. Responsible to the Head of Cabin Crew for ensuring that all Standard Operating Procedures (SOPs) and emergency procedures are performed by the Cabin Crew, in accordance with the operator's policies, procedures and SEP manual.
4. To report any incidents which occur during flight by using the reporting system
5. To counsel / brief / mentor fellow CC on board
6. Report any accidents, incidents, events or hazards that may adversely affect the safety of his/her department.
7. Supporting the achievement of safety performance targets.
8. Verify that all Cabin Crew are fit for flight and with all relevant documents valid for flight duty.
9. Coordinate and organize the functions and tasks of all Cabin Crew members:
   a) Execute Cabin Crew briefing
   b) Assign positions and working areas.
   c) Checking of emergency equipment, pre-flight safety briefing and reporting matters concerning safety (irregularities and malfunctions) to the PIC.
   d) Debriefing the Cabin Crew when required
10. Ensuring efficient communication with CC and ground personnel;

11. Ensuring contact with the flight deck at regular intervals.
12. Ensure high standards of In-Flight Service.
13. Manage, Controlling and monitoring of Cabin Crew operations which covers:
    a) Safety and security.
    b) Standards Operating Procedure (SOP).
    c) On-time Performance (OTP).
    d) To counsel / brief / mentor Cabin Crew onboard.
14. Ensure Cabin Crew maintain a good knowledge of emergency drills and procedure as stipulated in SEP manual.
15. Ensure Cabin Crew are familiar with aircraft galley equipment, catering stowage's and passenger amenity equipment and their operation.
16. People management to maximize productivity and to ensure a motivated and effective workforce.
17. Interact, liaise and manage the relationship with other operating departments.
18. Conduct Cabin Crew appraisals (CC/SNY)
19. Direct, coordinate and organize the functions and tasks of Cabin Crew.
20. To provide recommendations to improve Cabin Service Standards to the Department.
21. Monitor Standards and performance of Cabin Crew onboard and ensure Cabin Crew maintain grooming & image at all times whilst in uniform.
22. ICC shall record in VR any incident on board and submitted within twenty-four (24) hours from the arrival date.
23. These duties, responsibilities and activities may change or new ones may be assigned at any time with or without notice by the Head of Cabin Crew.
24. It is mandatory that all the above duties, functions, responsibilities and activities assigned or delegated are be conducted in accordance with the Regulatory and Company requirements and standards.
25. Other duties as assigned by Head of Cabin Crew and Manager Cabin Operations.

KNOWLEDGE:

1. Excellent in safety emergency procedures and company SOP.
2. Knowledgeable in civil aviation policies, procedures and standards related to job function.

3. Has at least 24 months of experience as operating cabin crew member, and succesfully completed an In-Charge Cabin Crew Member training course and the associated check.
4. Excellent cultural awareness.

SKILLS:

1. Comply with applicable regulations as well as company policies, procedures, and standards.
2. Good command of English and Bahasa Malaysia.
3. Excellent customer orientation and interpersonal skills.
4. High problem-solving skills.
5. Excellent self and time management.

ATTRIBUTES (ATTITUDE):

1. Agile and flexible.
2. Emotionally intelligent.
3. Discipline.
4. Accountable and reliable.
5. Team Player.
6. Open minded.
7. Independent and dependable.
8. Visionary and well-motivated.
9. Being well groomed.
10. KPI rating must be GOOD and above.
11. Safety knowledge must be GOOD.
12. No complaint received and NO disciplinary issue
13. GOOD attendance records.

MSIC SECTION	**:**	**H - Transportation and Storage**
MSIC DIVISION	**:**	**H51 – Air Transport**
MSIC GROUP	**:**	**H511 – Passenger Air Transport**
AREA	**:**	**Cabin Crew**
JOB TITLE	**:**	**In-charge Cabin Crew (Narrow Body)**
LEVEL	**:**	**Level 3**

RESPONSIBILITIES:

1. The SCC shall have overall responsibility to the PIC for the conduct, coordination and performance of the cabin procedures and safety standards, duties and functions applicable during normal operations, abnormal and emergency situations.
2. To be responsible for maintaining good discipline among all Cabin Crew whilst on duty.
3. To report any incidents which occur during flight by using the reporting system.
4. To conduct Cabin Crew Appraisal/ Assessment (Cabin Crew / Supernumerary).
5. To counsel/ brief/ mentor fellow cabin crew on board
6. To adhere and maintain familiarity with applicable laws, regulation and procedures.
7. To report any accidents, incidents, events or hazards that may adversely affect the safety of his/her department.
8. Shall carry out PIC's instructions.
9. Responsible for carrying out duties assigned to them and complying with all company regulations.
10. Responsible for ensuring guests comfort and maintain high standards of service delivery.
11. Supporting the achievement of safety performance targets.
12. To provide recommendations to improve Cabin Service Standards to the Department.
13. Other duties as assigned by the Head of Cabin Crew/ Cabin Crew Manager/ Manager Cabin Operations/ Assistant Cabin Crew Manager.

KNOWLEDGE:

1. Excellent in safety emergency procedures and company SOP.
2. Has at least 24 months of experience as an operating cabin crew member, and successfully completed an In-Charge Cabin Crew Member training course and the associated check.

3. Maintain a high degree of competence at all times by being conversant and maintain familiarity with laws, regulations, and procedures pertinent to their performance.
4. Excellent in cultural awareness.

SKILLS:

1. Comply with applicable regulations as well as company policies, procedures, and standards.
2. Good command of English and Bahasa Malaysia.
3. Excellent customer orientation and interpersonal skills.
4. High problem-solving skills.
5. Excellent self and time management.

ATTRIBUTES (ATTITUDE):

1. Agile and flexible.
2. Emotionally intelligent.
3. Discipline.
4. Accountable and reliable.
5. Team Player.
6. Open minded.
7. Independent and dependable.
8. Visionary and well-motivated.
9. Being well groomed.
10. KPI rating must be GOOD and above.
11. Safety knowledge must be GOOD.
12. No complaint received and NO disciplinary issue
13. GOOD attendance records.

MSIC SECTION	**:**	**H - Transportation and Storage**
MSIC DIVISION	**:**	**H51 – Air Transport**
MSIC GROUP	**:**	**H511 – Passenger Air Transport**
AREA	**:**	**Cabin Crew**
JOB TITLE	**:**	**Cabin Crew**
LEVEL	**:**	**Level 2**

RESPONSIBILITIES:

1. Cabin Crew shall be responsible to the PIC for the conduct, coordination of normal and emergency procedures specified in the OM, and performance of the Cabin Operations.
2. Is responsible for ensuring that all Standard Operating Procedures (SOPs) and emergency procedures are performed, in accordance with the operator's policies, procedures and SEP manual.
3. Maintaining a thorough working knowledge of cabin crew emergency drills and procedures.
4. Being thoroughly familiar with all aircraft galley equipment, catering stowage and passenger amenity equipment and their operation.
5. Ensure to maintain the high standards of public conduct whilst in circumstances in which they could reasonably be recognized as being a cabin crew.
6. To adhere and maintain familiarity with applicable laws, regulation and procedures**.**
7. Cabin Crew may be required to assist in operational and administration matters in the office when requested.
8. Cabin Crew is required to report any accidents, incidents, events or hazards that may adversely affect the safety of his/her department.
9. Cabin Crew are responsible to the ICC for carrying out duties assigned to them and complying with all company regulations.
10. All Cabin Crew members shall take all reasonable steps to ensure the safety of passengers in both normal and emergency circumstances. They shall report to PIC / In-Charge Cabin Crew on any incident that has endangered or could have endangered the safety of the operations.
11. Maintaining a thorough working knowledge of Cabin Crew emergency procedures as laid down in the SEP manual.

12. Being familiar with company aircraft galley equipment, catering stowage, and passenger amenities equipment and their operations.
13. Responsible to the ICC in ensuring guests comfort and maintain high standards of service delivery.
14. Comply with applicable regulations as well as company policies, procedures, and standards.
15. Cabin Crew shall maintain a high degree of competence at all times by being conversant and maintain familiarity with laws, regulations, and procedures pertinent to the performance of their duties.

KNOWLEDGE:

1. Safety emergency procedures and company SOP
2. Culture awareness
3. Rules and legislation

SKILLS:

1. Has successfully completed the cabin crew applicable regulatory and basic training course and the associated check.
2. The ability to read, speak, write, and understand a designated common language - ENGLISH to ensure appropriate communication with both crew members and passengers.
3. Able to operate equipment /systems, during normal, abnormal, and emergency situations onboard the aircraft.

ATTRIBUTES (ATTITUDE):

1. Medically fit to discharge the specified cabin crew duties.
2. Consistent in following instruction and complying with rules/procedures
3. Team work
4. Pleasant personality

MSIC SECTION	**:**	**H - Transportation and Storage**
MSIC DIVISION	**:**	**H51 – Air Transport**
MSIC GROUP	**:**	**H511 – Passenger Air Transport**
AREA	**:**	**Cabin Crew**
JOB TITLE	**:**	**Trainee Cabin Crew**
LEVEL	**:**	**Level 1**

RESPONSIBILITIES:

1. Responsible to the PIC for the conduct, coordination of normal and emergency procedures specified in the Operations Manual (OM), and performance of the Cabin Operations.
2. Is responsible for ensuring that all Standard Operating Procedures (SOPs) and emergency procedures are performed, in accordance with the operator's policies, procedures and SEP manual.
3. Maintaining a thorough working knowledge of cabin crew emergency drills and procedures.
4. Being thoroughly familiar with all aircraft galley equipment, catering stowage and passenger amenity equipment and their operation.
5. Ensure to maintain the high standards of public conduct whilst in circumstances in which they could reasonably be recognized as being a cabin crew.
6. To adhere and maintain familiarity with applicable laws, regulation and procedures**.**
7. All Trainee Cabin Crew shall take all reasonable steps to ensure the safety of passengers in both normal and emergency circumstances. They shall report to PIC / In-Charge Cabin Crew on any incident that has endangered or could have endangered the safety of the operations.
8. Trainee Cabin Crew are responsible to the ICC for carrying out duties assigned to them and complying with all company regulations.

KNOWLEDGE:

1. Safety emergency procedures and company SOP
2. Good Culture awareness.
3. Enhance the working knowledge of Cabin Crew emergency procedures as laid down in the SEP manual.
4. Familiarise with company aircraft galley equipment, catering stowage, and passenger amenities equipment and their operations.

5. Familiarise with applicable regulations as well as company policies, procedures, and standards.
6. Basic aviation theory and knowledge.
7. Has successfully completed the cabin crew applicable regulatory and basic training course and the associated check.

SKILLS:

1. The ability to read, speak, write, and understand a designated common language - ENGLISH to ensure appropriate communication with both crew members and passengers.
2. Able to operate equipment/systems, during normal, abnormal, and emergency situations onboard the aircraft.
3. Comply with applicable regulations as well as company policies, procedures and standards.

ATTRIBUTES (ATTITUDE):

1. Attention to detail.
2. Ability to follow instruction and motivated.
3. Team player.
4. Pleasant personality.
5. Resilience.
6. Being well groomed.

REGULATORY REQUIREMENTS:

1. Minimum height – Arm reach minimum at 210cm.
2. Minimum age of at least 18 years old.
3. Minimum education requirement SPM certificate.
4. Being clear of criminal record and passing security background check.
5. Has been assessed in accordance with the applicable requirements of Medical Directives to be physically and mentally fit to perform their duties and discharge their responsibilities safely.

MSIC SECTION	**:**	**H - Transportation and Storage**
MSIC DIVISION	**:**	**H51 – Air Transport**
MSIC GROUP	**:**	**H511 – Passenger Air Transport**
AREA	**:**	**Safety On-Board Cabin Crew**
JOB TITLE	**:**	**Cabin Safety Inspector (CSI)**
LEVEL	**:**	**Level 5**

RESPONSIBILITIES:

1. Assist to maintain necessary departmental reference documentation and manuals and ensure conformance to the regulatory and company requirement.
2. Develop and review mandatory safety training syllabus and training programme for both Flight Crew and Cabin Crew.
3. Evaluate and resolve cabin safety reports and conduct cabin safety investigation and timely closure for the improvement of safety and preventive action.
4. Develop, update and review examination questions for both Flight Crew and Cabin Crew.
5. Attend to poor crew safety performance during periodic checks and decide on enhancement training.
6. Conduct Cabin Crew Line Evaluation Checks, Ground and Cabin Inspections.
7. Ensure cabin crew compliance with applicable regulations as well as Company policies, procedures and standards.
8. Assist in the application of the AOC process. Manual writing and Document creation.
9. Ensures Cabin Operations adherence to all applicable laws and regulatory requirements and deliver outstanding safety performance and wellbeing in line with management objectives.
10. Ensures Cabin Operations communicates effectively through timely dissemination of information with regards to procedural, operational and equipment updates.
11. Establish in cooperation with Human Resources on the company’s recruitment policy and selection of new Cabin Crew.
12. Maintain the high operational, safety and efficiency of Cabin Crew.
13. Update, review, and upkeep of department manuals SEPM and CCTM.
14. Review poor safety training progress / performance of cabin crew during Initial and Recurrent

Training.

KNOWLEDGE:

1. 2 years' experience as a Safety Instructor.
2. Sound knowledge of cabin safety, rules, policies and procedures.
3. Possess good knowledge, skills and working experience of airlines industry.
4. Possess strong, visible, and supportive people management and leadership skills.
5. Strong cultural awareness.
6. Have the ability write reports, conduct interviews, carry out non-technical enquiry or investigation on cabin incidents / accidents and other skills include counselling, facilitation and evaluation.

SKILLS:

1. Able to communicate, read and write in the English Language satisfactorily.
2. Possess a strong leadership skill.
3. Possess good interpersonal and presentation skills.
4. Comply with applicable regulations as well as company policies, procedures and standards.

ATTRIBUTES (ATTITUDE):

1. Flexible and motivated.
2. Emotionally intelligent.
3. Discipline.
4. Accountable and reliable
7. Resilience.
8. Team Player
9. Open minded
10. Independent and Dependable

MSIC SECTION	**:**	**H - Transportation and Storage**
MSIC DIVISION	**:**	**H51 – Air Transport**
MSIC GROUP	**:**	**H511 – Passenger Air Transport**
AREA	**:**	**Cabin Crew**
JOB TITLE	**:**	**Line Checker / Cabin Safety Appraiser**
LEVEL	**:**	**Level 4**

RESPONSIBILITIES:

1. Promoting, enforcing and maintaining a high level of cabin operation standard of crew members.
2. Responsible for ensuring Cabin Operations are conducted in accordance with applicable regulations and standards.
3. To conduct online crew onboard performance appraisals and/or Cabin Crew Line Checks as required.
4. To mentor, coach, guide and assess Cabin Crew on Supernumerary (SNY)/ Supervised Line Flight Experience and online crew on ground and in-flight.
5. To ensure strict enforcement on Cabin Crew Department SOP, provide feedback and analysis.
6. Competent to execute safety duties and functions as assigned.
7. Ability to develop future cabin operations, policies and procedures and submit recommendations for improvement.
8. Able to execute safety duties and functions as assigned.
9. Uphold high standards of integrity and exercise discretion with confidential information.

KNOWLEDGE:

1. Well-versed in safety emergency procedures, company SOP, rules and regulations.
2. Well-versed and conversant in both written and spoken English.
3. Have the ability write reports, conduct interviews, carry out non-technical enquiry or investigation on cabin incidents / accidents and other skills include counselling, facilitation and evaluation.
4. Strong cultural awareness.

5. Knowledgeable in civil aviation regulations, directives and guidance.

SKILLS:

1. Good computer skills.
2. Comply with applicable regulations as well as company policies, procedures and standards.
3. Excellent communication skills with strong command of English language.
4. Well-developed interpersonal skill.
5. Good problem-solving and decision-making skill.

ATTRIBUTES (ATTITUDE):

1. Pleasant personality.
2. Emotionally intelligent.
3. Able to work independently and a good team player.
4. Details orientated
5. Highly discipline.

MSIC SECTION : H - Transportation and Storage
MSIC DIVISION : H51 – Air Transport
MSIC GROUP : H512 – Freight Air Transport
AREA : Unmanned Aircraft System Flight Crew
JOB TITLE : Flight Operation Manager (FOM)
LEVEL : Level 5

RESPONSIBILITIES:

1. Manages an Unmanned Aerial Vehicle flight operations department.
2. Establishes Operating procedures and policies to include standard flight operations and ground operations policies and safety policies.
3. Ensures compliance with UAS regulatory body requirements in addition to company procedures.
4. Maintain safety aspect of operation with regards to the compliance safety culture base of Safety Management Implementation.
5. Manage the airworthiness of the UAS operated under his/ her purview and Aviation Authority requirement of recertification, modification and System Updates.

Others duties and responsibilities:

1. Responsible for career development of flight operations personnel.
2. Coordinate and approve test cards for UAS flight testing and demos.
3. Coordinate and request CAAM restricted airspace as necessary.
4. Make recommendations for product quality and reliability.
5. Reviews schedules and budgets with program managers.
6. Acts as a Principal investigator on Accident/Incident Review Committees.
7. Supervise and grow the flight operations team and capabilities.
8. Develop and maintain project budgets and schedules.
9. Develop proposals and explore new business opportunities.
10. Plan and coordinate pre-flight activities.
11. Obtain flight waivers and clearances with the proper competent authority (FAA, range manager).

12. Work effectively with engineer and crew/ loader/ VO teams to integrate payloads in preparation for flight.
13. Conduct flight readiness and safety reviews.
14. Conduct post flight reviews and complete documentation.
15. Perform demonstration of flight and operation chain.
16. Forecast and update ongoing project costing and deliveries.
17. Perform abnormalities check on UAS prior flying through the system.
18. Ability to perform the mechanical and system trouble shooting.

KNOWLEDGE:

1. RCOC – B license as require by CAAM.
2. Software and firmware development education background.
3. UAS Operation, Unmanned Traffic Management System.
4. Knowledge to overwrite UTM codes when Emergency Response Procedure occur.
5. Pre-flight and Post-Flight operation.
6. Dangerous Goods knowledge.
7. Able to do Material Safety Data Sheet (MSDS) interpretation.
8. System integrity testing knowledge.
9. Audit knowledge.
10. Strong knowledge of the UTM system and Operational Procedure.

SKILL:

1. Well-developed interpersonal skills to relate to all levels, both inside and outside the organization.
2. Strong management and leadership skill.
3. Demonstration skills.
4. Organizational ability.
5. Good analytical skills.
6. Commercial awareness.

ATTITUDE:

1. Situational awareness on operations and environments.

2. Able to adapt in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
3. Pleasant personality.
4. Organised and take responsibility on the mandatory requirement.
5. Able to work with pressure in fast pace environment.
6. Ability to explain and motivate subordinate.
7. Management skill from operation through documentation.

REGULATORY REQUIREMENT (CAAM CAD 6011-part V)

1. The operator shall appoint FOM as accepted by the CAAM to ensure that the operations are in compliance with the standards required by the CAAM, and any additional requirements defined by the UAS operator.
2. The qualifications of the FOM are:
   a) Has extensive applicable and acceptable experience to the type of operation conducted in the Special UAS Approval;
   b) Possess sound managerial capability.

MSIC SECTION : H - Transportation and Storage
MSIC DIVISION : H51 – Air Transport
MSIC GROUP : H512 – Freight Air Transport
AREA : Unmanned Aircraft System Flight Crew
JOB TITLE : UAS Flight Administrator
LEVEL : Level 4

RESPONSIBILITIES:

1. Manage the all-relative Concept of Operation (CONOPS) of the operation from Permits application, system application, updating system requirement and UAS integrity check prior flying.
2. Plan the flight operation through system, flight telemetry, primary and secondary airspace for operation develop a mitigation plan.
3. Plan the flight and act as Remote Pilot when it is required in execution of the operation.
4. Manage the system troubleshooting for operation and integrity test requirement.
5. Liasson with Flight Operation Manager on the distribution of freight and schedule.

Other job responsibilities:

1. Develop day of flight schedule in the Unmanned Traffic Management (UTM).
2. Communicate and decimate flight schedule to RPAS.
3. Coordinate mission dependent resources.
4. Schedule mission personnel for RPAS.
5. Schedule loading plan and logistic load.
6. Establish transport route and set up the traffic schedule via UTM.
7. Manage logistics flight plan for day-to-day flight operation.
8. Manage the UTM system as System Administrator.
9. Facilitate the mission CONOPS (Concept of Operation).
10. Secure mission supplies for logistics and UAV operation requirement.
11. Act as back up RPAS to perform the flight monitoring for the operations.
12. Identify type of the freight for flight plan and delivery schedule.
13. Develop the system integrity test for the UTM and telemetry security.

14. To meet their security and safety oversight obligations, towards UAS operators and the position, velocity, planned trajectory and performance capabilities of each UA in the airspace through the UTM system.

KNOWLEDGE:

1. RCOC – B license as require by CAAM.
2. Software and firmware development education background.
3. UAS Operation, Unmanned Traffic Management System.
4. Knowledge to overwrite UTM codes when Emergency Response Procedure occurrence.
5. Pre-flight operation and Dangerous Goods.
6. Able to do Material Safety Data Sheet (MSDS) interpretation.
7. Knowledgeable in System integrity testing.

SKILL:

1. Well-developed interpersonal skills to relate to all levels, both inside and outside the organization.
2. Comply with applicable regulations as well as company policies, procedures and standards.
3. Good communication skill with a good command of English language.
4. Organizational ability.
5. Good analytical skills.

ATTITUDE:

1. Situational awareness on operations and environments.
2. Able to adapt in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
3. Pleasant personality.
4. Organised and take responsibility on the mandatory requirement.
5. Able to work with pressure in fast pace environment.

REGULATORY REQUIREMENT:

The operator shall nominate an Authorized Technical Personnel (ATP)/ System Administrator/ Maintenance controller and accepted by the CAAM. To ensure that the technical requirements

are in compliance with the standards required by the CAAM, and any additional technical requirements defined by the UAS operator.

MSIC SECTION : H - Transportation and Storage
MSIC DIVISION : H51 – Air Transport
MSIC GROUP : H512 – Freight Air Transport
AREA : Unmanned Aircraft System Flight Crew
JOB TITLE : Remote Pilot Unmanned Aircraft System
LEVEL : Level 3

RESPONSIBILITIES:

1. Verify all pre-flight operation has been conducted
2. Verification of payload properly secure via UAS operating system
3. Freight goods management
4. Planning for freight distribution versus work load of UAS
5. Perform UAS trouble shooting from sign of abnormalities
6. Flight deployment and flight management sequence
7. Communicate with ATC for flight clearance
8. Monitor and control the drone's movement and position during flight
9. Manage the Ground and Flight support equipment
10. Execute the Emergency Recovery Procedure (ERP) as required
11. Understanding the Concept of Operation requirement and its operational standard scenario
12. Maintain detailed records of flight logs and equipment maintenance

REGULATORY REQUIREMENT: Responsibilities of the remote pilot

The remote pilot shall:

a) Not perform duties under the influence of psychoactive substance or alcohol or when it is unfit to perform its task due to injury, fatigue, medication, sickness or other causes;
b) Have the appropriate remote pilot competency as defined in the Special UAS Project Approval and carry a proof of competency while operating the UAS.

Before starting a UAS operation, the remote pilot shall comply with all of the following:

a) Obtain updated NOTAMs in regards to the area of operations;

b) Ensure that the operating environment is compatible with the authorised or declared limitations and conditions.

KNOWLEDGE:

1. UAS component and basic operation system.
2. UAS Piloting.
3. UAS Principle of flight.
4. UAS Performance and Loading.
5. Knowledgeable in Dangerous Goods management.

SKILL:

1. UAS mechanical and system troubleshooting.
2. Piloting skill.
3. Observation skill.
4. Communication skill.
5. Technical observation.
6. Situational awareness.
7. Leadership skill.

ATTITUDE:

1. Physical mobility and stamina.
2. Ability to deliver and follow instruction.
3. Team leaders.
4. Compliance to operation safety requirement.
5. Operational System savvy.

MSIC SECTION : H - Transportation and Storage
MSIC DIVISION : H51 – Air Transport
MSIC GROUP : H512 – Freight Air Transport
AREA : Unmanned Aircraft System Flight Crew
JOB TITLE : UAS Crew/Pay Loader/Visual Observer (VO)
LEVEL : Level 2

RESPONSIBILITIES:

1. Perform all functions of loading and unloading of payload to UAS operations
2. Operational support of deployed flight operations
3. Work in groups or independently with minimal or no supervision
4. Will be required to work odd shifts, weekends, and/or extended hours
5. Responsible for data management and generation
6. Provides general logistics functions
7. Maintain site support equipment
8. Troubleshoots technical problems and issues and determines technical solutions
9. Perform test flight abnormalities prior flight
10. If the Remote Pilot becomes incapacitated, the Crew/ loader assumes the Pilot's authority and responsibility for the aircraft and cargo.
11. Perform abnormalities check on UAS prior flying.
12. Ability to perform the basic mechanical and system trouble shooting.

KNOWLEDGE:

1. Navigation and Meteorology.
2. UAS principle of flight.
3. Basic human performance.
4. UAS maintenance.
5. UAS Operation and basic Unmanned Traffic Management (UTM) System.
6. Pre-flight operation and Dangerous Goods.

SKILL:

1. Well-developed interpersonal skills.

2. Able to relate and communicate to all levels, both inside and outside the organization.
3. Organizational ability.
4. Good analytical skills.
5. Commercial awareness.

ATTITUDE:

1. Situational awareness on operations and environments.
2. Able to adapt, accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
3. Friendly, mature, honest, meticulous, self-starter, able to perform under pressure in a challenging environment.
4. Ability to maintain high confidentiality, tactful and discretion when dealing with people.

MSIC SECTION : H - Transportation and Storage

MSIC DIVISION : H51 – Air Transport

MSIC GROUP : H512 – Freight Air Transport

AREA : Freight Flight Crew

JOB TITLE : Director of Flight Operations (DFO)

LEVEL : Level 8

RESPONSIBILITIES:

1. An active Pilot with the status of Pilot in Command (PIC) responsible to lead the Flight Operations Department effectively in accordance with regulatory, company, ICAO and IOSA requirements, and ensure continuous compliance to all applicable CAAM and International regulations and standards.
2. Responsible for developing, implementing and following up on aircraft operations related projects that will enhance safety, optimize operation, reduce operating cost and preserve the company's contractual rights.
3. The management of safety risk and security threats to aircraft operations.
4. Call for a hearing in case of accident or incident or whenever he deems it as necessary in case of irregularity.
5. Overlook safety, training and development of the flight crew members and ensuring that all necessary certifications are up to date.
6. Operations are conducted in accordance with conditions and restrictions of the Air Operator Certificate (AOC) and in compliance with applicable regulations and standards of the company.

KNOWLEDGE:

1. Acquire comprehensive knowledge of the CAA 1969, MCAR 2016 and any associated requirements and procedures, operations specifications, operations manuals (OMs) and Safety Management System.
2. Proficient with the airline's Operations Manual requirements.
3. To show competency in Area, Route and Aerodrome operated by the airline.
4. Good cultural awareness.

SKILLS:

1. Well-developed interpersonal skills.
2. Good analytical skills.
3. Possess good leadership skills.
4. Possess good customer service and public relations skills.
5. Excellent commercial awareness.
6. Strong problem-solving skills.
7. Good decision-making skills.
8. Strong planning and organizational skills.
9. Strong negotiation and persuasion skills.
10. Comply with applicable regulations as well as company policies, procedures and standards.

ATTRIBUTES (ATTITUDE):

1. Passion for aviation and flight operations.
2. Strong integrity and ethical values.
3. Able to represent the Company in a professional manner.
4. Strong team work and collaboration.
5. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
6. Attention to detail.
7. Pleasant personality.
8. Resilience.
9. Discipline.
10. Being well groomed.
11. Highly motivated.

REGULATORY REQUIREMENTS:

1. Hold the license and rating necessary to act as the aircraft's pilot in command (PIC) on which the instruction is given.

2. Hold at least the license and aircraft type rating for which instruction is being given in the appropriate category.
3. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.
4. Acquire practical experience and expertise in the application of aviation safety standards and safe operating practices.
5. Minimum 5 years management working experience at which 2 years should be from an aviation industry in an appropriate position.
6. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.

MSIC SECTION : H - Transportation and Storage

MSIC DIVISION : H51 – Air Transport

MSIC GROUP : H512 – Freight Air Transport

AREA : Freight Flight Crew

JOB TITLE : Designated Flight Examiner (DFE)

LEVEL : Level 7

RESPONSIBILITIES:

1. Ensure the standards of the flight crews as required by the regulatory and company requirements.
2. To conduct training and checking as per the Operations Manual requirements.
3. To remain impartial and record only factual observations made during checks and training.
4. To ensure that safety is assured at all times in the aircraft and simulator.
5. Development of content and method of training.
6. Quality control by ensuring a uniform standard of grading and assessment.
7. Ensure of a high standard of all flight crew released from the Training Section.
8. Ensure approved methods of training are used.
9. Identification of non-standard methodologies.
10. Instructor training, monitoring and checking.
11. Analyse of poor progress and failures recommendation of courses of remedial training.
12. Conduct skill tests for the issue of type ratings for multi-pilot aircraft.
13. To evaluate and decide on the performance of the candidates during checks and training.
14. To intervene and cease training and/or checking when the candidate or situation is not suitable to proceed.
15. To take over as Pilot in Command (PIC) of the flight in the interest of safety and legality when the situation arises and accounts for it.
16. Demonstrate flying proficiency in the aircraft type to which the nominee seeks checking/ training authority.

KNOWLEDGE:

1. Comprehensive knowledge of the MCAR 2016, CAD 1 and CAD 1006 and any associated requirements and procedures, operations specifications, operations manuals (OMs) and Safety Management System.
2. Possess thorough knowledge of the Company's Operations Manual, Operating Specifications, Standard Operating Procedure (SOP) and applicable aircraft flight and operating manuals.
3. Acquire technical theoretical knowledge in aviation.
4. Good cultural awareness.

SKILLS:

1. Well-developed interpersonal skills.
2. Excellent communication skills.
3. Organizational ability.
4. Good analytical skills.
5. Possess a good leadership skill.
6. Possess good customer service and public relations skills.
7. Commercial awareness.
8. Comply with applicable regulations as well as company policies, procedures and standards.
9. Demonstrate key instructional and communication skills to teach.

ATTRIBUTES (ATTITUDE):

1. Analytical and alert to student's needs.
2. High level of discipline and able to perform and setting good examples.
3. Motivator.
4. Calm and thoughtful.
5. Pleasant personality.
6. Look for opportunities to improve own qualifications, effectiveness and service / standards level.

7. Acquire a respected level of maturity.
8. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
9. Being well groomed.
10. Highly motivated.

REGULATORY REQUIREMENTS:

1. Hold the license and rating necessary to act as the aircraft's pilot in command (PIC) on which the instruction is given.
2. Hold at least the license and aircraft type rating for which instruction is being given in the appropriate category
3. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.

MSIC SECTION : H - Transportation and Storage

MSIC DIVISION : H51 – Air Transportation

MSIC GROUP : H511 – Freight Air Transport

AREA : Freight Flight Crew (FI)

JOB TITLE : Flight Instructor / Ground Instructor

LEVEL : Level 6

RESPONSIBILITIES:

1. To uphold the high standards of all flight crews as required by the regulatory bodies and the airline.
2. To conduct training and checking as per the Operations Manual requirements.
3. Development of content and method of training.
4. Development of training documentation.
5. Development of training projects.
6. Development of section input for operational SOPs.
7. Quality control by ensuring a uniform standard of grading and assessment.
8. Maintenance of a high standard of all flight crew released from the Training Section.
9. Ensuring approved methods of training are used.
10. Identification of non-standard methodologies.
11. Instructor training, monitoring and checking.
12. Analysis of poor progress and failures recommendation of courses of remedial training.
13. Give flight instruction for the issue of a type rating including Crew Resource Management (CRM) training in the appropriate category and multi crew cooperation.
14. To remain impartial and record only factual observations made during checks and training.
15. To ensure that safety is assured at all times in the aircraft and simulator.

16. Conduct line checks.
17. To evaluate and decide on the performance of the candidates during checks and training.
18. To intervene and cease training and/or checking when the candidate or situation is not suitable to proceed.
19. To take over as Pilot in Command (PIC) of the flight in the interest of safety and legality when the situation arises and accounts for it.
20. Demonstrate flying proficiency in the aircraft type to which the nominee seeks checking/ training authority.

KNOWLEDGE:

1. Comprehensive knowledge of the MCAR 2016, CAD 1 and CAD 1006 and any associated requirements and procedures, operations specifications, operations manuals (OMs) and Safety Management System.
2. Demonstrate thorough knowledge of the Company's Operations Manual, Operating Specifications, Standard Operating Procedure (SOP) and applicable aircraft flight and operating manuals.
3. Good cultural awareness.
4. Demonstrate technical theoretical knowledge in aviation.

SKILLS:

1. Well-developed interpersonal skills.
2. Comply with applicable regulations as well as company policies, procedures and standards.
3. Organizational ability.
4. Good analytical skills.
5. Excellent leadership skills.
6. Possess good customer service and public relations skills.
7. Commercial awareness.
8. Demonstrate key instructional and communication skills to teach.

ATTRIBUTES (ATTITUDE):

1. Passion to teach and help others.
2. Pleasant personality.
3. Sincere and able to admit errors.
4. High level of discipline and able to perform and setting good examples.
5. Well groomed.
6. Attention to detail.
7. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
8. Receptive toward critical feedback.
9. Highly motivated.

REGULATORY REQUIREMENTS:

1. Hold the license and rating necessary to act as the pilot in command (PIC) of the aircraft on which the instruction is given.
2. Hold at least the license and aircraft type rating for which instruction is being given in the appropriate category.
3. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.

MSIC SECTION : H - Transportation and Storage

MSIC DIVISION : H51 – Air Transport

MSIC GROUP : H511 – Freight Air Transport

AREA : Freight Flight Crew

JOB TITLE : Captain

LEVEL : Level 5

RESPONSIBILITIES:

Prior to Flight:

1. Responsible for the safety of aircraft, its occupants and cargo begin from the time he takes control of the aircraft and ends when he hands over the aircraft to the authorized ground personnel or the next flight crew taking charge or when the aircraft is parked, locked and sealed.
2. Ensure that the pre-flight inspection has been carried out, and decide whether or not to accept the aircraft with unserviceability allowed by the Configuration Differential List (CDL) or Minimum Equipment Lists (MEL).
3. Ensure the FO's (First Officer)/Co-Pilot required documents are carried and valid.
4. Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base.
5. Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS.
6. Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan.
7. Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy.
8. Ascertain that the FOB (Fuel on Board) is sufficient and suitable for the safe conduct of the flight.
9. Make all reasonable steps to ensure that the airplane mass and balance is within the calculated limits for the operating conditions.

10. Be familiar and ensure compliance with the laws, regulations and procedures of those States where operations are conducted.
11. Providing the operations section with complete and up-to-date information as to the movement and serviceability of his aircraft.
12. To physically check the cargo area to ensure all freights are secured for the duration of the flight.

In Flight:

1. Be responsible for the operation of the aircraft in accordance with the rules of the air, except that the captain may depart from these rules in circumstances that render such departure absolutely necessary in the interest of safety.
2. Be responsible for the safety of all crew members, passengers and cargo on board, as soon as he arrives on board, until he leaves the airplane at the end of the flight.
3. His decisions must give absolute priority of safety, and have due regard for legality, economy, passenger comfort and adherence to schedule.
4. To carry out duties in accordance with the SOP (Standard Operating Procedures) and Operations Manual, including procedures, limitations and performance.
5. Safely and properly conduct the flight in compliance with the current flight plan.
6. Monitoring flight progress and aircraft systems and observe surrounding environment and performance of other crew.
7. Inform ATC of any aircraft or vessel in distress or requiring assistance and rendering any assistance of which he is capable without endangering the safety of his own aircraft or its occupants.
8. Report all cases of infectious disease on board to the medical authorities. Record the details of any birth, death on board, on the incident / occurrence report form provided or, in its absence, the voyage report.

KNOWLEDGE:

1. Proficient with the airline's Operations Manual, policies, procedures and standards related to the job function.
2. To show competency in Area, Route and Aerodrome operated by the airline.
3. Proficient in oral and written English.

4. To show proficiency in aviation theory and knowledge and successfully completed the Aircraft Type Rating course.
5. Good cultural awareness.

SKILLS (General):

1. Well-developed interpersonal skills.
2. The ability to communicate to all levels, both inside and outside of the organization.
3. Organizational ability.
4. Good analytical skills.
5. Strong leadership skills.
6. Possess good customer service and public relations skills.
7. Comply with applicable regulations as well as company policies, procedures and standards.
8. Commercial awareness.

ATTRIBUTES (ATTITUDE):

1. Friendly, mature, humble, honest, meticulous, self-starter.
2. Ability to maintain high confidentiality, tactful and discretion when dealing with people.
3. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
4. Being well groomed.
5. Highly motivated.

REGULATORY REQUIREMENTS:

1. A valid CAAM ATPL with valid instrument and type rating.
2. A valid CAAM medical certificate (class 1)
3. A validation certificate/license from CAAM (foreign license holder).
4. Proficient in oral and written English (English Language Proficiency of level 4).
5. To show proficiency and successfully pass the Annual Line Check, License Proficiency Check (LPC), Operator's Proficiency Check (OPC) and Aviation related examinations.
6. To obtain at least a Level 4 in the English Language Proficiency (ELP) rating.

MSIC SECTION : H - Transportation and Storage

MSIC DIVISION : H51 – Air Transport

MSIC GROUP : H511 – Freight Air Transport

AREA : Freight Flight Crew

JOB TITLE : First Officer (FO)/Senior First Officer (SFO)

LEVEL : Level 4

RESPONSIBILITIES:

Prior to Flight:

1. Ensure the PIC's (Pilot in Command) required documents are carried and valid.
2. Participate in the preparation of the flight and to attentively monitor its progress in order to be able to assume the authority/responsibility at any given time.
3. Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base.
4. Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS.
5. Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan.
6. Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy.
7. Ascertain that the FOB (Fuel on Board) is sufficient for the safe conduct of the flight.
8. To ensure that a pre-flight inspection is carried out prior to each flight.
9. Participates in the Captain's crew briefing and make himself aware of all relevant aeronautical and meteorological information as well as the relevant papers documenting the aircraft technical status and its anticipated load.
10. To physically check the cargo area to ensure all freights are secured for the duration of the flight.

In Flight:

1. Executes tasks and functions as the PF (Pilot Flying) of PM (Pilot Monitoring), as delegated by the PIC.
2. To carry out duties in accordance with the SOP (Standard Operating Procedures), including procedures, limitations and performance, as directed by the PIC.
3. Safely and properly conduct the flight in compliance with the current flight plan and PIC instructions.
4. Maintaining a record of flight progress, including ATC (Air Traffic Control) clearances, altimeter settings/readings, meteorology reports, etc on the OFP.
5. Draws the attention of the PIC on any condition or circumstances that may impair the safety of the flight.
6. Assisting the PIC in the management of the flight deck.
7. Monitoring flight progress and aircraft systems and observe surrounding environment and performance of another crew.
8. In-flight, the Co-Pilot, as directed by the Commander executes the tasks and functions of either the PF or PNF.
9. Assist the Commander in the management of the flight deck work by observing a well-balanced task distribution systematic co-operation and exchange of information, monitoring the flight progress and the aircraft systems and observing the airspace and the performance of other Flight deck crew members.
10. Deals with all documents that have to be completed (e.g., Operational Flight Plan, occurrence reports, Voyage Report & etc).
11. After completion of the flight, the Co-pilot assists the Commander in completing the aircraft documentation, leaving the flight deck clean and tidy for the next flight crew, handing over the aircraft to the next flight crew taking charge or to the authorized ground personnel or in absence of an engineer or responsible person, having the aircraft secured and handing over the

completed documentation to authorized personnel or forwarding such documents by other means.

12. If the Commander becomes incapacitated, the Co-Pilot assumes the Commander's authority and responsibility for the aircraft, crew, passengers and cargo.

KNOWLEDGE:

1. Proficient with the airline's Operations Manual, policies, procedures and standards related to the job function.
2. To show competency in Area, Route and Aerodrome operated by the airline.
3. Proficient in oral and written English.
4. To show proficiency in aviation theory and knowledge and successfully completed the Aircraft Type Rating course.
5. Good cultural awareness.

SKILLS:

1. Well-developed interpersonal skills.
2. Organizational ability.
3. Good analytical skills and leadership skills.
4. Possess good customer service and public relations skills.
5. Commercial awareness.
6. Comply with applicable regulations as well as company policies, procedures and standards.
7. Able to safely operate the aircraft without guidance.

ATTRIBUTES (ATTITUDE):

1. Able to adapt, handle and solve problems in High Stress Level situations in accordance with Standard Operating Procedures (SOP) and applying good Crew Resource Management (CRM) skills.
2. Friendly, mature, humble, honest, meticulous, self-starter.
3. Being well groomed.
4. Highly motivated.
5. Ability to maintain high confidentiality, tactful and discretion when dealing with people.

REGULATORY REQUIREMENTS:

1. Hold a valid Malaysian ATPL with valid instrument and type rating or hold a valid Malaysian CPL/IR with Frozen ATPL or equivalent ICAO recognised licence.
2. Hold a valid CAAM medical certificate (Class 1)
3. Minimum English Language Proficiency of level 4 (ICAO)
4. To show proficiency and successfully pass the Annual Line Check, License Proficiency Check (LPC), Operator's Proficiency Check (OPC) and Aviation related examinations.
5. Having passed all tests and checks.

MSIC SECTION : H - Transportation and Storage

MSIC DIVISION : H51 – Air Transport

MSIC GROUP : H512 – Freight Air Transport

AREA : Freight Flight Crew

JOB TITLE : Second Officer (SO)/Junior Co-Pilot

LEVEL : Level 3

RESPONSIBILITIES:

Prior to Flight:

1. Ensure the PIC's (Pilot in Command) required documents (license, passport, attestation certificate, etc) are carried and valid.
2. Participate in the preparation of the flight and to attentively monitor its progress in order to be able to assume the authority/responsibility at any given time.
3. Ensure that his and other flight crew's EFB (Electronic Flight Bag) are updated, current and in good condition. Check that the required manuals, charts, documents and forms are valid, and current and cover the intended operation until return to home base.
4. Review weather information and NOTAMS (Notice to Air Missions), including company NOTAMS.
5. Verify that all information contained in the OFP (Operational Flight Plan) is accurate and consistent with the ATS (Air Traffic Service) flight plan.
6. Review the FCBP (Flight Crew Briefing Package) and confirm its validity and accuracy.
7. Ascertain that the FOB (Fuel on Board) is sufficient for the safe conduct of the flight.
8. To ensure that a pre-flight inspection is carried out prior to each flight.
9. If the Commander becomes incapacitated, the Co-Pilot assumes the Commander's authority and responsibility for the aircraft, crew, passengers and cargo.
10. Participates in the Commander's crew briefing and make himself aware of all relevant aeronautical and meteorological information as well as the relevant papers documenting the aircraft technical status and its anticipated load.
11. To physically check the cargo area to ensure all freights are secured for the duration of the flight.

In Flight:

1. Executes tasks and functions as the PF (Pilot Flying) of PM (Pilot Monitoring), as delegated by the PIC.
2. To carry out duties in accordance with the SOP (Standard Operating Procedures), including procedures, limitations and performance, as directed by the PIC.
3. Safely and properly conduct the flight in compliance with the current flight plan and PIC instructions.
4. Maintaining a record of flight progress, including ATC (Air Traffic Control) clearances, altimeter settings/readings, meteorology reports, etc on the OFP.
5. Draws the attention of the PIC on any condition or circumstances that may impair the safety of the flight.
6. Assisting the PIC in the management of the flight deck.
7. Monitoring flight progress and aircraft systems and observe surrounding environment and performance of other crews.
8. In-flight, the Co-Pilot, as directed by the Commander executes the tasks and functions of either the PF or PNF.
9. Assist the Commander in the management of the flight deck work by observing a well-balanced task distribution systematic co-operation and exchange of information, monitoring the flight progress and the aircraft systems and observing the airspace and the performance of other Flight deck crew members.
10. Deals with all documents that have to be completed (e.g., Operational Flight Plan, occurrence reports, Voyage Report & etc).
11. After completion of the flight, the Co-pilot assists the Commander in completing the aircraft documentation, leaving the flight deck clean and tidy for the next flight crew, handing over the aircraft to the next flight crew taking charge or to the authorized ground personnel or in absence of an engineer or responsible person, having the aircraft secured and handing over the completed documentation to authorized personnel or forwarding such documents by other means.

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2. Hold a valid CAAM medical certificate (Class 1)
3. Minimum English Language Proficiency of level 4 (ICAO)
4. To show proficiency and successfully pass the Annual Line Check, License Proficiency Check (LPC), Operator's Proficiency Check (OPC) and Aviation related examinations.
5. Having passed all tests and checks.

ANNEX 3: APPOINTMENT AND INVITATION LETTER TO DEVELOPMENT PANELISTS

Tarikh: 10 JANUARI 2023
No. Rujukan: OF/ADM2022/PPR-FGD2

SEPERTI SENARAI EDARAN

Tuan/ Puan,

JEMPUTAN KE SESI PEMBANGUNAN KERANGKA PEKERJAAN/ *OCCUPATIONAL FRAMEWORK (OF)* UNTUK BIDANG MSIC H51: PENGANGKUTAN UDARA

1. Sukacita dimaklumkan sesi perbincangan kumpulan fokus *(Focus Group Discussion - FGD)* akan diteruskan dengan penumpuan kepada pembangunan *Occupational Description & Responsibilties* bagi setiap tajuk pekerjaan yang telah dikenal pasti. Sesi ini juga akan menyemak semula *Occupational Structure (OS)* yang telah dibangunkan dalam sesi terdahulu. Penyelidik juga akan membincangkan perkara-perkara berbangkit lain dalam sesi kali ini. Sesi ini akan dipantau oleh pegawai-pegawai Jabatan Pembangunan Kemahiran (JPK), Kementerian Sumber Manusia.

2. AJK Pembangunan OF akan diberikan honorarium mengikut kadar dan terma yang ditetapkan oleh pihak firma. Kadar honorarium adalah RM400.00/hari (termasuk elaun perjalanan). Penginapan dan elaun perjalanan tambahan hanya disediakan kepada mereka yang datang dari luar Lembah Klang untuk sesi-sesi pembangunan. Pembayaran honorarium dibuat pada hari akhir sesi pembangunan.

3. Bagi menjayakan projek pembangunan ini tuan/puan dijemput hadir seperti ketetapan yang berikut:

Tarikh	**:**	**28 – 29 JANUARI 2022 (SABTU & AHAD)**
Masa	**:**	**9.00am – 5.30pm (Aturcara Program di Lampiran 2)**
Tempat	**:**	**THE MINES BEACH RESORT HOTEL** Mines Resort City, Jalan Dulang, 43300 Seri Kembangan, Selangor

4. Sebarang pertanyaan dan maklumat lanjut boleh hubungi Urus Setia, En. Abu Musa bin Mohamad Isa, 011 2700 3561 atau emel beliau, abumusa.isa@gmail.com

Sekian, terima kasih.

Yang benar,

Aqilah Fatin Binti Kassim
Pengarah Urusan

LAMPIRAN 1

SENARAI EDARAN

NO.	NAME	POSITION	ORGANISATION
1.	Mr. Jonathan Gary Choe	Crew Safety Instructor	MAB Academy
2.	Ms. Pong Pui See	Cabin Crew Manager	Air Asia
3.	Ms. Sri Shantini Baratharajoo	Cabin Safety Training Specialist	Air Asia
4.	Captain Rajindar Singh	Flight/Ground Instructor	AirAsia
5.	Ts. Abd Razak Bin Mohamad Zin	Engineering Manager	International Aero Training Academy (IATAC)
6.	Mr Don Benedict Tan Peng Hock	Head, Cabin Crew	MYAirline
7.	Ms Mandy Pui Hwei Yoong	Manager, Recruitment & IR	MYAirline
8.	Ms. Darleena binti Abdullah	Logistics Consultant & Trainer	Freight Resources & Services Sdn Bhd
9.	Mr. Azrizal Irwan bin Arshad	Head of Drone Program	Allied Aeronautics Training Centre

LAMPIRAN 2

ATURCARA PROGRAM

Masa	**Acara**
JUMAAT, 27/01/2023	
3.00 petang	Daftar Masuk / *Check-in (Hanya Panel dari Luar Lembah Klang)*
SABTU, 28/01/2023	
7.00 pagi	Sarapan *(Hanya Panel yang menginap)*
8.30	Ketibaan Jemputan
9.00	**Sesi Pembangunan**
10.30	Minum Pagi
11.00	**Sesi Pembangunan**
1.00 petang	Makan Tengahari
2.30	**Sesi Pembangunan**
3.30	Minum Petang
4.00	**Sesi Pembangunan**
5.30	Penangguhan Sesi Pembangunan
AHAD, 29/01/2023	
7.00 pagi	Sarapan *(Hanya Panel yang menginap)*
8.30	Ketibaan Jemputan
9.00	**Sesi Pembangunan**
10.30	Minum Pagi
11.00	**Sesi Pembangunan**
1.00 petang	Makan Tengahari dan Daftar Keluar / *Check-out (Hanya Panel yang menginap)*
2.30	**Sesi Pembangunan**
3.30	Minum Petang
4.00	**Sesi Pembangunan**
5.30	Bersurai