Aerospace & Aviation Sector Skill Council

Skill India | GOVERNMENT OF INDIA MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP | N·S·D·C National Skill Development Corporation Transforming the skill landscape

Model Curriculum

Airline Flight Load Controller

SECTOR: AEROSPACE AND AVIATION
SUB-SECTOR: AIRLINE
OCCUPATION: OPERATIONS
REF ID: AAS/Q0604, V 1.0
NSQF LEVEL: 5

Skill India
Aerospace & Aviation Sector Skill Council
N·S·D·C National Skill Development Corporation

Certificate

CURRICULUM COMPLIANCE TO
QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS
is hereby issued by the

AEROSPACE & AVIATION SECTOR SKILL COUNCIL (AASSC)

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/Qualification Pack : '**Airline Flight Load Controller**' QP No. '**AAS/Q0604' NSQF level 5**'

Date of issuance : 03 October 2017
Valid up to : 02 October 2018
** Valid up to the next review date of the Qualification Pack*

(Authorised signatory)
Aerospace & Aviation Sector Skill Council (AASSC)

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Airline Flight Load Controller

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "Airline Flight Load Controller", in the "Aerospace & Aviation" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Airline Flight Load Controller		
Qualification Pack Name & Reference ID.	AAS/Q0604		
Version No.	1.0	Version Update Date	20 – 02 - 2017
Pre-requisites to Training	Class XII		
Training Outcomes	After completing this programme, participants will be able to; • Undertake load distribution and calculation to ensure intended flight operates with the safety envelope as prescribed in the organizations operations manual. • Identify and use basic tools, equipment & materials; Understanding of carrying out tool box, machinery equipment for its operation. • Achieve basic communication skills and good inter-personal skills. • Acquire abilities to stand and walk for long periods of time consistent kneeling, squatting and reaching above the head with caution to avoid accidents.		

This course encompasses 4 out of 4 Compulsory National Occupational Standards (NOS) of "Airline Flight Load Controller" Qualification Pack and 1 out of 1 Optional NOS issued by "Aerospace & Aviation Sector Skill Council (AASSC)".

Compulsory NOS :

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	**Follow safety and security procedures** **Theory Duration** (hh:mm) **25:00** **Practical Duration** (hh:mm) **23:00** **Corresponding NOS Code** **AAS/N0502**	Candidates will be able to; • comprehend the organisation's safety and security policies and procedures • comprehend the regulatory guidelines on safe conduct of operations and maintenance of conditions to thwart any acts of unlawful interference • report any identified breaches of safety, and security policies and procedures to the designated person • coordinate with other resources at the workplace (within and outside the organisation) to achieve safe and secure environment • identify and mitigate any safety and security hazards like illness, accidents, fires or acts of unlawful interference if it falls within the limits of individual's authority • report any hazards outside the individual's authority to the relevant person in line with organisational procedures and regulatory guidelines • follow organisation's emergency procedures for incidents or accidents, fires or acts of unlawful interference • identify and recommend opportunities for improving health, safety, and security to the designated person • ensure completion of all health and safety records are updates and procedures well defined	White/Black board, Markers, computer and projector, trainer's guide, student handbook, Charts regarding health & hygiene, fire-fighting, first aid, chart of prohibited items, Screening & search equipment – hand-held metal detector, doorframe metal detector, Under chassis inspection mirror, torch, Chart of parking layout, traffic markings, signals, cones, barriers, marking tape, signage, jackets, batons, Chart on traffic signals and symbols, walkie-talkie, personal protective equipment (PPE) (consisting of safety jacket, safety goggles, ear plugs, gloves & safety shoes)
2	**Pre-departure planning**	Candidates will be able to;	White/Black board, Markers, computer and projector, trainer's

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Theory Duration (hh:mm) **34:00** **Practical Duration** (hh:mm) **46:00** **Corresponding NOS Code** **AAS/N0602**	• gather all information related to the aircraft and specific flight and ascertain a zero fuel weight figure for the aircraft and flight. • confirm operating parameters such as Dry Operating Weight (DOW), are in accordance to the operations manual. • perform trials on the estimated loads of the aircraft to check if the aircraft will operated within the safe trim limits during its intended flight • plan the distribution of passenger load and cargo load to achieve safe operations of the intended flight • issue the loading plan to the loading areas of baggage and cargo • accept and document a special load using relevant documents (e.g. NOTOC) in line with organisation's procedures ensuring that the aircraft structural limitations are not exceeded • issue the loading instruction report (LIR) to the loading supervisor detailed the distribution of load on the aircraft in accordance with organisation and regulatory guidelines, • gather the fuel uplift weight from the relevant stakeholder • calculate the total load for an aircraft • perform checks with total load on aircraft on ensure the aircraft is in safe operating limits during its intended flight • complete all records relating to the load fully and within the timescales required by organisation • perform trials to ascertain the trim of the aircraft during its intended flight with zero fuel weight • perform trials to ascertain	guide, student handbook, Aircraft handling manual (AHM) of widely used aircraft

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		the trim of the aircraft during its intended flight with total load including fuel • perform necessary adjustments to loads when the aircraft is out of trim for its intended flight • confirm the aircraft is able to meet the requirement of Maximum Take Off Weight and Maximum Landing Weight for the intended flight. • perform necessary last minute adjustments within the acceptable norms as per organisation and regulatory policies. • take decisions on last minute offloading of load in case of threat to safety of the aircraft. • ensure all required documents pertaining to load and trim are available in the prescribed format on the aircraft for its intended flight.	
3	**Post departure flight closure** **Theory Duration** (hh:mm) **34:00** **Practical Duration** (hh:mm) **46:00** **Corresponding NOS Code** **AAS/N0607**	Candidates will be able to; • assimilate the documents required to prepare the trip file as per organisational and regulatory policies • verify the accuracy of the documents to ensure the documents are complete in all respect and relate to the same aircraft or flight • close the flight in the departure control system being used by the airline and ensure the flight is closed without any errors • file the relevant documents in the trip file and store as per the standards of the organisation and regulatory standards	White/Black board, Markers, computer and projector, trainer's guide, student handbook,
4	**Work Effectively in a Team** **Theory Duration** (hh:mm) **13:00** **Practical Duration** (hh:mm) **19:00** **Corresponding**	Candidates will be able to; • display courteous and helpful behaviour at all times. • take opportunities to enhance the level of assistance offered to colleagues. • meet all reasonable	White/Black board/ Chart paper, Markers/Computer and projector, trainer's guide, student handbook, video film demonstrating typical questioning techniques

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	NOS Code **AAS / N0503**	requests for assistance within acceptable workplace timeframes. • complete allocated tasks as required. • seek assistance when difficulties arise. • use questioning techniques to clarify instructions or responsibilities. • identify and display a non-discriminatory attitude in all contacts with customers and other staff members. • follow the appropriate dress code and presentation as required by the workplace, job role and level of customer contact. • follow personal hygiene procedures according to organisational policy and relevant legislation. • interpret, confirm and act on workplace information, instructions and procedures relevant to the particular task • interpret, confirm and act on legal requirements in regard to antidiscrimination, sexual harassment and bullying. • ask questions to seek and clarify workplace information. • plan and organise daily work routine within the scope of the job role • prioritise and complete tasks according to required timeframes • identify work and personal priorities and achieve a balance between competing priorities	
	Compulsory NOS: **Total Duration (hh:mm)** **240:00** **Theory Duration (hh:mm)** **106:00** **Practical Duration (hh:mm)** **134:00**		

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Optional NOS : OPTIONS (Optional to choose any or all or none) OPTION 1: Operate a vehicle airside		
5	**Operate a vehicle airside** **Theory Duration** (hh:mm) **19:00** **Practical Duration** (hh:mm) **29:00** **Corresponding NOS Code** **AAS/N0702**	Candidates will be able to; • make sure that airside driving authorization/license is appropriate and valid to the vehicle • confirm that the vehicle is lit and marked according to airside driving requirements • complete documents relating to using the vehicle in line with the organisation procedures • manoeuvre the vehicle in a controlled manner in all conditions • park the vehicle safely in appropriate areas in line with organisation procedures • follow airside signage/markings • give priority to moving aircraft at all times • maintain a safe distance between the vehicle and aircraft at all times as defined by regulatory guidelines • make sure that all doors and shutters (where relevant) are closed while driving the vehicle • reverse the vehicle according to organisational and regulatory guidelines • maintain persistent vigilance when driving • ensure wearing of appropriate Personal Protective Equipment (PPE) while driving • secure vehicle loads in line with the organisation procedures • carry an airside driving license in line with the organisation procedures and regulatory guidelines • take appropriate remedial action when foreign object debris (FOD) or spillage is seen on the airfield/apron • report dangerous or unsafe	White/Black board/ Chart paper, Markers/Computer and projector, trainer's guide, student handbook, Chart of parking layout, traffic markings, signals, cones, barriers, marking tape, signage, jackets, and communication. Chart on traffic signals and symbols, walkie-talkie, video content demonstrating safe & secure airside driving procedures,

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		practices to appropriate authority • get rid of all waste products in line with the organisation procedures and regulatory guidelines • provide unhindered access for emergency services at all times • report all airside incidents, accidents and emergencies in line with organisation procedures and regulatory guidelines • respond to airside incidents, accidents and emergencies in line with organisation procedures and regulatory guidelines	
	Option 1: **Total Duration (hh:mm)** **48:00** **Theory Duration (hh:mm)** **19:00** **Practical Duration (hh:mm)** **29:00**		Unique equipment used; • relevant extracts of trip file / charts/documents, charts & documents • relevant extracts of operating manual (i.e. DOW, sample copies of NOTOC, LIR, etc., charts/documents indicating 'Maximum take-off weight' & 'Maximum landing weight' of types of aircrafts, calculator • charts/documents regarding control system software in use • PC/ laptop/ palmtop with flight control system software • Aircraft handling manual (AHM) of widely used aircraft
	Grand Total Duration **Minimum Duration for the QP= 240 hrs** **Theory: 106 hrs** **Practical: 134 hrs** **Maximum Duration for the QP= 288 hrs** **Theory: 125 hrs** **Practical: 163 hrs**		

Grand Total Course Duration (Minimum): 240 Hours, 0 Minutes
Grand Total Course Duration (Maximum): 288 Hours, 0 Minutes

*(This syllabus/ curriculum has been approved by **Aerospace & Aviation Sector Skill Council***

Trainer Prerequisites for Job role: "Airline Flight Load Controller" mapped to Qualification Pack: "AAS/Q0604"

Sl. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "AAS/Q0604".
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well- organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	Graduate (in any subject)
4a	Domain Certification	Statutory Certificate from Aerospace & Aviation Sector Skill Council (AASSC) for Job Role: "Airline Flight Load Controller" mapped to QP: "AAS/Q0604". Minimum accepted score for domain certification will be 80%.
4b	Platform Certification	Recommended that the Trainer is certified for the job role "Trainer" mapped to the Qualification Pack : "MEP/Q 0102". Minimum accepted percentage as per respective SSC guidelines is 80%.
5	Experience	2-3 years of experience in mechanical services.

Annexure : Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role: Airline Flight Load Controller

Qualification Pack: AAS/Q0604

Sector Skill Council: Aerospace and Aviation Sector Skill Council

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5. To pass the Qualification Pack, every trainee should score a minimum of 70% in aggregate
6. The marks are allocated PC wise, however, every NOS will carry a weightage in the total marks allocated to the specific QP

		Marks Allocation			
Assessment outcomes	**Assessment Criteria for outcomes**	**Total Marks**	**Out of**	**Theory**	**Skills Practical**
1. AAS/N0502 Follow safety and security procedures	PC1. comply with the organisation's safety and security policies and procedures	**100**	10	5	5
	PC2. comply with the regulatory guidelines on safe conduct of operations and maintenance of conditions to thwart any acts of unlawful interference		10	5	5
	PC3. report any identified breaches of safety, and security policies and procedures to the designated person		10	5	5
	PC4. coordinate with other resources at the workplace (within and outside the organisation) to achieve safe and secure environment		20	10	10
	PC5. identify and mitigate any safety and security hazards like illness, accidents, fires or acts of unlawful interference if it falls within the limits of individual's authority		10	5	5
	PC6. report any hazards outside the individual's authority to the relevant person in line with organisational procedures and regulatory guidelines		20	10	10

Marks Allocation

Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out of	Theory	Skills Practical
	PC7. follow organisation's emergency procedures for accidents, fires or acts of unlawful interference		5	2	3
	PC8. identify and recommend opportunities for improving health, safety, and security to the designated person		10	8	2
	PC9. complete all health and safety records are updates and procedures well defined		5	2	3
		Total	**100**	**52**	**48**
2. AAS/N0702 Operate a vehicle airside	PC1. make sure that personal driving authorisation is appropriate to the vehicle		5	2	3
	PC2. confirm that the vehicle is lit and marked according to airside requirements		5	2	3
	PC3. complete documents relating to using the vehicle in line with to organisation procedures		5	2	3
	PC4. manoeuvres the vehicle in a controlled manner in all conditions		5	2	3
	PC5. park the vehicle safely in appropriate areas in line with organisation procedures		5	2	3
	PC6. follow airside signage / markings		5	2	3
	PC7. give priority to moving aircraft at all times		5	2	3
	PC8. maintain a safe distance between the vehicle and aircraft at all time	**100**	5	2	3
	PC9. make sure that all doors and shutters (where relevant) are closed when you are driving the vehicle		5	2	3
	PC10. reverse the vehicle according to aviation and organisational procedures		5	2	3
	PC11. be constantly vigilant when driving		5	2	3
	PC12. wear appropriate personal protective equipment when driving		5	2	3
	PC13. secure vehicle loads in line with your organisation procedures		5	2	3
	PC14. carry an airside driving pass or license in line with your organisation procedures		5	2	3
	PC15. take appropriate remedial action when foreign objects (FOD) or spillages are seen on the airfield		5	2	3
				Marks Allocation	

Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out of	Theory	Skills Practical
	PC16. report dangerous or unsafe practices to an appropriate authority		5	2	3

	PC17. get rid of all waste products in line with your organisation procedures		5	2	3
	PC18. provide unhindered access for emergency services at all times		5	2	3
	PC19. report all airside accidents and emergencies in line with organisation procedures		5	2	3
	PC20. respond to airside accidents and emergencies in line with organisation procedures		5	2	3
		Total	**100**	**40**	**60**
3. AAS/N0602 Pre-departure planning	PC1. gather all information related to the aircraft and specific flight and ascertain a zero fuel weight figure for	**100**	5	2.5	2.5
	PC2. confirm operating parameters such as Dry Operating Weight (DOW), are in accordance to the operations manual.		3	1.5	1.5
	PC3. perform trials on the estimated loads of the aircraft to check if the aircraft will operate within the safe trim limits during its intended flight		5	2.5	2.5
	PC4. plan the distribution of passenger load and cargo load to achieve safe operations of the intended flight		3	1.5	1.5
	PC5. issue the loading plan to the loading areas of baggage and cargo		6	2.5	3.5
	PC6. accept and document special load(s) using relevant documents e.g. notice to captain (NOTOC) in line with organisation procedures ensuring that the aircraft structural limitations are		6	2.5	3.5
	PC7. issue the loading instruction report (LIR) to the loading supervisor detailing the distribution of load on the aircraft in accordance with organisation and regulatory guidelines		6	2.5	3.5
	PC8. gather the fuel uplift weight from the relevant stakeholder		6	2.5	3.5
	PC9. calculate the total load for an aircraft		6	2.5	3.5
	PC10. perform checks with total load on aircraft on ensure the aircraft is in safe operating limits during		6	2.5	3.5
	PC11. complete documentation relating to the load and trim as per organisation and regulatory guidelines		6	2.5	3.5
	PC12. perform trials to ascertain the trim of the aircraft during its intended flight with zero fuel weight		6	2.5	3.5
	PC13. perform trials to ascertain the trim of the aircraft during its intended flight with total load including fuel		6	2.5	3.5

	PC14. perform necessary adjustments to loads when the aircraft is out of trim for its intended flight		6	2.5	3.5
	PC15. confirm the aircraft is able to meet the requirement of Maximum Take Off Weight (MTOW) and Maximum Landing Weight for the intended		6	2.5	3.5
	PC16. perform necessary last minute adjustments within the acceptable norms as per organisation and		6	2.5	3.5
	PC17. take decisions on last minute offloading of load in case of threat to		6	2.5	3.5
	PC18. ensure all required documents pertaining to load and trim are available in the prescribed format on the aircraft for its intended		6	2.5	3.5
		Total	**100**	**43**	**57**
4. AAS/N0607 Post departure flight closure	PC1. use the operating system to extract the flight schedule	**100**	7	3	4
	PC2. analyse the flight schedule to identify the aircraft tail numbers and the rotation of each aircraft tail number		7	3	4
	PC3. extract the relevant information about the aircraft characteristic and performance based on tail number like Extended Twin Engine operations (ETOPS) or any altitude restriction due		7	3	4
	PC4. interact with various stakeholders to gather relevant information		4	2	2
	PC5. gather zero fuel weight for the intended flight from load controller		7	3	4
	PC6. gather meteorological data from the sources as approved by the organisation or the regulatory		7	3	4
	PC7. gather information from maintenance department or any other stakeholder which can impact the performance of the aircraft during its intended flight		7	3	4
	PC8. create a flight plan based on the information gathered in the format approved by the organisation and		7	3	4

				Marks Allocation	
Assessment outcomes	**Assessment Criteria for outcomes**	**Total Marks**	**Out of**	**Theory**	**Skills Practical**
	PC9. ensure that the flight plan is accurate and contains all the mandated information by the organisation and the regulatory body		7	3	4
	PC10. derive the fuel requirement based on the flight plan for the intended		7	3	4
	PC11. highlight any key areas of concerns for the briefing to cockpit crew.		5	2	3

	PC12. provide a detailed briefing to the cockpit crew with details of route, weather condition, any restrictions on the aircraft, alternate airport details, total load on the flight and the		7	3	4
	PC13. answer any queries of the cockpit crew with regards to the flight plan.		7	3	4
	PC14. file the flight plan with the appropriate authorities in the appropriate		7	3	4
	PC15. communicate with various stakeholders like Load controller to provide the details of fuel load for the		7	3	4
		Total	**100**	**43**	**57**

			Marks Allocation		
Assessment outcomes	**Assessment Criteria for outcomes**	**Total Marks**	**Out of**	**Theory**	**Skills Practical**
5. AAS / N0503 Work Effectively as a Team	PC1. display courteous and helpful behaviour at all times.	**100**	8	3	5
	PC2. take opportunities to enhance the level of assistance offered to colleagues.		7	3	4
	PC3. meet all reasonable requests for assistance within acceptable workplace timeframes.		8	3	5
	PC4. complete allocated tasks as required.		4	1	3
	PC5. seek assistance when difficulties arise.		3	1	2
	PC6. use questioning techniques to clarify instructions or responsibilities.		7	3	4
	PC7. identify and display a non-discriminatory attitude in all contacts with customers and other staff members.		7	3	4
	PC8. observe appropriate dress code and presentation as required by the workplace, job role and level of customer contact.		7	3	4
	PC9. follow personal hygiene procedures according to organisational policy and relevant legislation.		7	3	4
	PC10. interpret, confirm and act on workplace information, instructions and procedures relevant to the particular task.		7	3	4
	PC11. interpret, confirm and act on legal requirements in regard to anti- discrimination, sexual harassment and bullying.		7	3	4
	PC12. ask questions to seek and clarify workplace information.		7	3	4
	PC13. plan and organise daily work routine within the scope of the job role.		7	3	4
	PC14. prioritise and complete tasks according to required timeframes.		7	3	4
	PC15. identify work and personal priorities and achieve a balance between competing priorities.		7	3	4
		Total	**100**	**42**	**58**