

Model Curriculum

Airline Pushback Operator

SECTOR: AEROSPACE AND AVIATION
SUB-SECTOR: AIRLINE
OCCUPATION: LOADING & UNLOADING
REF ID: AAS/Q0702
SECTOR: AEROSPACE AND AVIATION



Certificate

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

AEROSPACE & AVIATION SECTOR SKILL COUNCIL (AASC)
for the

MODEL CURRICULUM

Complying to the National Occupational Standards of
Job Role/Qualification Pack : **“Airline Pushback Operator”** QP No. AAS/Q0702 NSQF level 4

Date of issuance : 11 July 2017
Valid up to : 10 July 2018
* Valid up to the next review date of the Qualification Pack



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

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Airline Pushback Operator

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Airline Pushback Operator”, in the “Aerospace & Aviation” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Airline Pushback Operator		
Qualification Pack Name & Reference ID.	AAS/Q0607		
Version No.	1.0	Version Update Date	15 – 03 - 2017
Pre-requisites to Training	Class X		
Training Outcomes	<p>After completing this programme, participants will be able to;</p> <ul style="list-style-type: none"> • Ensure safe pushback/towing of the aircraft • 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 7 out of 7 National Occupational Standards (NOS) of “Airline Pushback Operator” Qualification Pack issued by “Aerospace & Aviation Sector Skill Council (AASSC)”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Follow safety and security procedures Theory Duration (hh:mm) 25:00 Practical Duration (hh:mm) 23:00 Corresponding NOS Code AAS/N0502</p>	<p>Candidates will be able to;</p> <ul style="list-style-type: none"> • 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 organization) 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 accidents, fires or acts of unlawful interference • identify and recommend opportunities for improving health, safety, and security to the designated person • complete all health and safety records are updates and procedures well defined 	<p>White/Black board, Markers, computer and projector, trainer’s guide, student handbook, Charts regarding health & hygiene, fire-fighting, first aid, chart of prohibited items,</p>
2	<p>Operate a vehicle airside Theory Duration (hh:mm) 19:00 Practical Duration (hh:mm) 29:00 Corresponding NOS Code AAS/N0702</p>	<p>Candidates will be able to;</p> <ul style="list-style-type: none"> • make sure that airside driving authorization/ license is appropriate 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 	<p>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,</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> • give priority to moving aircraft at all times • maintain a safe distance between the vehicle and aircraft at all time 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 • be constantly vigilant when driving • wear appropriate Personal Protective Equipment (PPE) while driving • secure vehicle loads in line with the organisation procedures • carry an airside driving pass or 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 • report dangerous or unsafe 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 to be competent, the user/individual on the job must be able to: • report all airside accidents and emergencies in line with organisation procedures and regulatory guidelines • respond to airside accidents and emergencies in line with organisation procedures and regulatory guidelines 	
3	<p>Prestart inspection of equipment/ vehicle Theory Duration (hh:mm) 20:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code AAS/N0701</p>	<p>Candidates will be able to;</p> <ul style="list-style-type: none"> • identify the appropriate prestart inspection checklist for the respective equipment / vehicle • perform the prestart inspection on the respective equipment / vehicle as per the checklist • identify any defects on the equipment / vehicle and determine if the same can impact the operations of the equipment / vehicle • ensure that all the findings against the prestart inspection checklist are duly filled in the appropriate checklist forms 	<p>White/Black board, Markers, computer and projector, trainer's guide, student handbook,</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> record any additional defects found beyond the prestart inspection checklist in the appropriate form in relevant detail file the duly filled form in the manner as defined by the organisation or regulatory policies and procedures 	
4	<p>Post operation inspection of equipment/ vehicle Theory Duration (hh:mm) 19:00 Practical Duration (hh:mm) 21:00 Corresponding NOS Code AAS/N0703</p>	<p>Candidates will be able to;</p> <ul style="list-style-type: none"> identify appropriate post operations inspection checklist for the respective equipment/vehicle perform the post operations inspection on the respective equipment/ vehicle as per the checklist identify any defects with the equipment/vehicle and determine if the same can impact the operations of the respective equipment/vehicle ensure that all the findings against the post operations inspection checklist are duly filled in the appropriate checklist forms record any additional defects found or caused during operations or in the appropriate form in relevant detail file the duly filled form in the manner as defined by the organisation or regulatory policies and procedures 	<p>White/Black board/ Chart paper, Markers/Computer and projector, trainer's guide, student handbook, video film demonstrating typical questioning techniques</p>
5	<p>Pushback Operations Theory Duration (hh:mm) 24:00 Practical Duration (hh:mm) 24:00 Corresponding NOS Code AAS/N0607</p>	<p>Candidates will be able to;</p> <ul style="list-style-type: none"> align the pushback (towbar or towbar less) with the center line of the aircraft before the aircraft movement; completely raise the towbar wheels (if used) before the start of the aircraft movement standby for clearance to push communication from flight crew or responsible ground staff select appropriate gear on tractor and slowly begin movement prior to the aircraft movement, make sure that the parking brakes are released and the anti-collision lights are switched on (depending on the local airport regulations); keep the manoeuvring speed to a minimum, and apply the vehicle brakes gently scan the apron during pushback, monitor clearances and wing walkers (if applicable) to ensure that aircraft is moving clear of all obstructions. 	<p>White/Black board, Markers, computer and projector, trainer's guide, student handbook,</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> • always be prepared to stop • ensure during pushback the steering turn limits are not exceeded and advise flight crew if any are exceeded (nose gear damage will occur if limits are exceeded). • if responsible ground crew on interphone is walking on ramp, maintain visual contact and ensure that a safe distance is maintained from the nose gear during entire pushback 	
6	<p>Take action to deal with incidents, accidents and emergencies in the aviation security environment</p> <p>Theory Duration (hh:mm) 16:00</p> <p>Practical Duration (hh:mm) 16:00</p> <p>Corresponding NOS Code AAS/N0501</p>	<p>Candidates will be able to;</p> <ul style="list-style-type: none"> • comprehend the probability and severity of emergency situations • take action to deal with emergencies, incidents or accidents in line with its organisation's procedures and regulatory guidelines` • make sure the action planned does not increase the risk or threat to oneself and others • consider the needs of others when taking action • keep all the relevant and appropriate person(s) informed on action taken in line with organisation's procedures • get help from the appropriate sources in situation that are outside your own authority or ability • document all actions taken to mitigate risks/ emergencies in line with organisation procedures and regulatory guidelines 	
7	<p>Work Effectively in a Team</p> <p>Theory Duration (hh:mm) 13:00</p> <p>Practical Duration (hh:mm) 19:00</p> <p>Corresponding NOS Code AAS/N0503</p>	<p>Candidates will be able to;</p> <ul style="list-style-type: none"> • display courteous and helpful behavior at all times. • take opportunities to enhance the level of assistance offered to colleagues. • meet all reasonable 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. 	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> • observe 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 	
	<p>Total Duration Theory Duration (hh:mm) 136:00 Practical Duration (hh:mm) 152:00</p>	<p>Unique equipment used;</p> <ul style="list-style-type: none"> • Aircraft handling manual (AHM) of widely used aircraft, pushback tractor • personal protective equipment (PPE) (consisting of safety jacket, safety goggles, ear plugs, gloves & safety shoes) • pushback tractor, dolly, cargo dozers, step ladder, fork lift • container, pallets, mock cargo packages 	

Grand Total Course Duration: 288 Hours, 0 Minutes

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

Trainer Prerequisites for Job role: “Airline Pushback Operator” mapped to Qualification Pack: “AAS/Q0702”

Sl. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “AAS/Q0702”.
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	Class X
4a	Domain Certification	Statutory Certificate from Aerospace & Aviation Sector Skill Council (AASSC) for Job Role: “Airline Pushback Operator” mapped to QP: “AAS/Q0702”. 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

Annexure: Assessment Criteria

Job Role : Airline Pushback Operator
Qualification Pack : AAS/Q0702
Sector Skill Council : Aerospace & Aviation

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 50% 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

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		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

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		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 authorization is appropriate to the vehicle	100	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. maneuvers 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		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
	PC16. report dangerous or unsafe practices to an appropriate authority		5	2	3

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		Total Marks	Out of	Theory	Skills Practical
	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/N0701 (prestart inspection of equipment/ vehicle)	PC1. identify the appropriate prestart inspection checklist for the respective equipment / vehicle		10	5	5
	PC2. perform the prestart inspection on the respective equipment / vehicle as per the checklist		20	10	10
	PC3. identify any defects on the equipment / vehicle and determine if the same can impact the operations of the equipment / vehicle		20	10	10
	PC4. ensure that all the findings against the prestart inspection checklist are duly filled in the appropriate checklist forms		10	5	5
	PC5. record any additional defects found beyond the prestart inspection checklist in the appropriate form in relevant detail		20	10	10
	PC6. file the duly filled form in the manner as defined by the organisation or regulatory policies and procedures		20	10	10
		Total	100	50	50
4. AAS/N0703 (Post operation inspection of equipment/ vehicle)	PC1. identify the appropriate post operations inspection checklist for the respective equipment / vehicle	100	17	8	9
	PC2. perform the post operations inspection on the respective equipment / vehicle as per the checklist		17	8	9
	PC3. identify any defects on the equipment / vehicle and determine if the same can impact the operations of the equipment / vehicle		17	8	9

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		Total Marks	Out of	Theory	Skills Practical
	PC4. ensure that all the findings against the post operations inspection checklist are duly filled in the appropriate checklist forms		17	8	9
	PC5. record any additional defects found or caused during operations or in the appropriate form in relevant detail		16	8	8
	PC6. file the duly filled form in the manner as defined by the organisation or regulatory policies and procedures		16	8	8
		Total	100	48	52
5. AAS/N0704 (Pushback operations)	PC1. align the tractor or tractor and towbar combination with the center line of the aircraft before the aircraft movement;	100	10	5	5
	PC2. completely raise the towbar wheels (if used) before the start of the aircraft movement		10	5	5
	PC3. standby for clearance to push communication from flight crew or responsible ground staff;		5	2	3
	PC4. select appropriate gear on tractor and slowly begin movement;		10	5	5
	PC5. prior to the aircraft movement, make sure that the parking brakes are released and the anti-collision lights are switched on (depending on the local airport regulations);		10	5	5
	PC6. keep the manoeuvring speed to a minimum, and apply the vehicle brakes gently;		10	5	5
	PC7. scan the apron during pushback, monitor clearances and wing walkers (if applicable) to ensure that aircraft is moving clear of all obstructions.		20	10	10
	PC8. always be prepared to stop;		10	5	5
	PC9. ensure during pushback the steering turn limits are not exceeded and advise flight crew if any are exceeded (nose gear damage will occur if limits are exceeded).		10	5	5
	PC10. if responsible ground crew on interphone is walking on ramp, maintain visual contact and ensure a safe distance is		5	2	3

		Marks Allocation			
Assessment outcomes	Assessment Criteria for outcomes	Total Mark	Out of	Theory	Skills Practical
	maintained from the nose gear during entire pushback				
		Total	100	49	51
6. AAS/N0501 (Take actions to deal with incidents, accidents and emergencies in the aviation security environment)	PC1. assess the probability and severity of emergency situations	100	20	10	10
	PC2. take action to deal with emergencies, incidents or accidents in line with its organisation's procedures and regulatory guidelines		20	10	10
	PC3. make sure the action planned does not increase the risk or threat to oneself and others		10	5	5
	PC4. consider the needs of others when taking action		10	5	5
	PC5. keep all the relevant and appropriate person(s) informed on action taken in line with organisation's procedures		10	6	4
	PC6. get help from the appropriate sources in situation that are outside your own authority or ability		20	10	10
	PC7. document all actions taken to mitigate risks/ emergencies in line with organisation procedures and regulatory guidelines		10	5	5
		Total	100	51	49
		Marks Allocation			
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out of	Theory	Skills Practical
7.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.		7	3	4

PC5. seek assistance when difficulties arise.				
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