



# Participant Handbook

Sector  
**Aerospace and Aviation**

Sub-Sector  
**Airline**

Occupation  
**Loading and Unloading**

Reference ID: **AAS/Q0103, Version 1.0**  
**NSQF Level 3**



**Airline Cargo Assistant**



**Shri Narendra Modi**  
Prime Minister of India

**“ Skilling is building a better India.  
If we have to move India towards  
development then Skill Development  
should be our mission. ”**

## Table of Contents

S.No.	Modules and Units	Page No.
1.	<b>Introduction</b>	<b>1</b>
	Unit 1.1 – About the Programme	3
	Unit 1.2 – About the Job Role - Airline Cargo Assistant	5
	Unit 1.3 – About the QP-NOS	14
2.	<b>Follow Safety and Security Procedure [AAS/N0502]</b>	<b>23</b>
	Unit 2.1 – Safety Policy and Safety Management System	25
	Unit 2.2 – Hazard and Reporting	39
	Unit 2.3 – Workplace Health and Safety	53
3.	<b>Accept, Prepare Cargo and Mail for Air Transport under the Supervision of the Supervisor [AAS/N0102]</b>	<b>61</b>
	Unit 3.1 – Cargo Acceptance	63
	Unit 3.2 – Physical Inspection of Goods	66
	Unit 3.3 – Marking and Labelling	69
	Unit 3.4 – Cargo Acceptance-Special Cargo	74
	Unit 3.5 – Cargo Breakdown, Delivery: In-Transit and Transfer	92
4.	<b>Delivery of Incoming Cargo and Mail [AAS/N0101]</b>	<b>109</b>
	Unit 4.1 – Acceptance	111
	Unit 4.2 – Documentation	115
	Unit 4.3 – Irregularities in Customs	117
	Unit 4.4 – Cargo Forwarding Storage and Preparations of Flights	124
5.	<b>Operating a Vehicle Airside [AAS/N0702]</b>	<b>133</b>
	Unit 5.1 – General Rules - Operating a Vehicle Airside	135
	Unit 5.2 – Aircraft Standing Markings	143
	Unit 5.3 – Driving Inside Aircraft Parking Stand	147
	Unit 5.4 – Adverse Weather Conditions	160
6.	<b>Work Effectively in a Team [AAS/N0503]</b>	<b>167</b>
	Unit 6.1 – Support the Team	169
	Unit 6.2 – Maintain Personal Presentation	175
	Unit 6.3 – Develop Effective Work Habits	180
7.	<b>Employability and Entrepreneurship Skills</b>	<b>193</b>
	Unit 7.1 – Personal Strengths and Value Systems	197
	Unit 7.2 – Digital Literacy: A Recap	211
	Unit 7.3 – Money Matters	215
	Unit 7.4 – Preparing for Employment and Self Employment	222
	Unit 7.5 – Understanding Entrepreneurship	230
	Unit 7.6 – Preparing to be an Entrepreneur	250
8.	<b>Abbreviations and Acronyms</b>	<b>264</b>





### 1.2.10 Role of Airports and Airlines in a Cargo – Based Business Model

Cargo airports play a large role in combination with the operations of cargo airlines and the interaction of airports within the shipping industry. Airport operations are responsible for activities such as:

- Warehousing and storage -safety and space.
- Custom operations can run smoothly and efficiently.
- Security clearance.
- Dangerous Goods Protocol.
- Package validation.
- Cargo operations.

The airline is responsible for activities at the airports such as:

- Resource management of terminal staff.
- Loading/unloading cargo.
- Shipment prioritisation.
- Receive shipments.

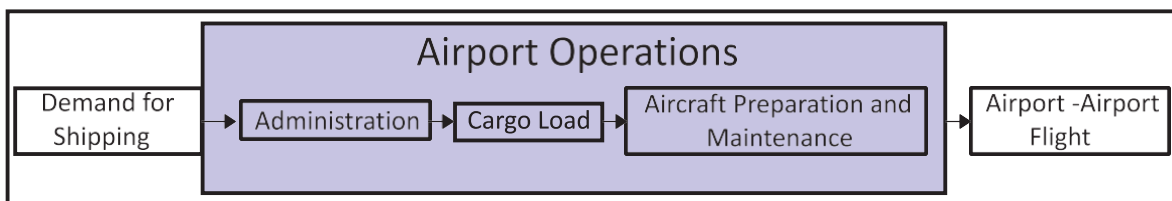


Fig 1.2.10 (a) Airport Operations within the Courier Supply Chain

### 1.2.11 Competitive Advantages of Air Cargo

Why is there a relationship between a product's value and its tendency to be shipped by air transportation? There is no single answer, but it is safe to say that relatively high-value commodities tend to go by air, despite the much higher cost for one or several of the following reasons:

- Small shipment size.
- Security.
- Cost of capital.
- Inventory cost.

### 2.3.1 Protective Clothing

- Technicians are required to wear proper clothing while performing maintenance on aircraft, vehicles and machinery.
- Loose clothing should be avoided as this may get caught up in the moving parts of the machinery.
- All personnel are required to wear uniform of their company at all times, when working on the airside.
- It is strictly prohibited to wear short pants and short blouses on the airside.



Fig 2.3.1 (a) Protective Clothing

### 2.3.2 Hearing Protection

Prolonged exposure to high noise levels on the apron for example turbines, ground power unit and air starters can cause permanent damages to hearing. That is why hearing protection is required to be used in noisy areas while on the airside.



Fig 2.3.2 (a) Hearing Protection

### 2.3.3 High Visibility Safety Vests

Part of remaining safe on the apron is to be visible, especially in darkness or low light situations. To accomplish this, one is required to wear an orange reflective safety vest, whenever he/she is on the apron.

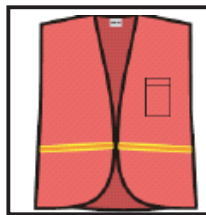


Fig 2.3.3 (a) Safety Vests

### 3.2.1 Inspection of Good



*Fig 3.2.1 (a) Physical Inspection of Goods*

Upon receipt of the physical cargo verify the following information:

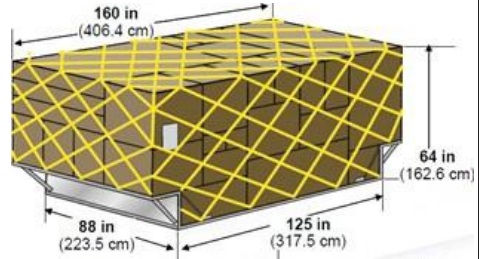
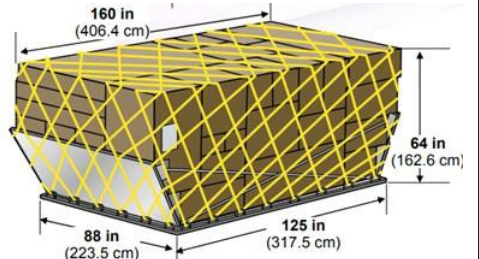
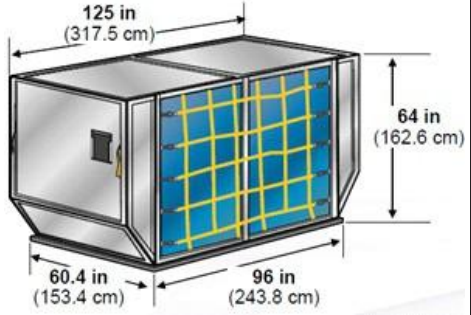
- Number of pieces. Inspect the cargo or ULD for signs of damage, tampering or pilferage. If tampered, treat as unknown cargo and apply applicable screening procedures.
- Weight.
- Volume or dimensions.
- ULD information, if applicable.
- Special handling information, if applicable.
- Routing information, if applicable.
- Applicable labeling.
- Verify that the applicable security information in accordance with TACT (electronic or paper) accompanies the cargo check if a security declaration is provided (known cargo) and verify that it includes a valid regulated agent ID.
- The security status code is applicable for the aircraft being operated.
  - SPX/SHR for passenger and cargo aircraft.
  - SCO for cargo aircraft only.
- If no security declaration is provided the cargo must be treated as unknown cargo and applicable screening procedures are applied.

### 3.5.4 Types of Loading Devices

Common designation	Description	Max gross weight in kg	Tare weight in kg	ULD
LD-2	Half-width lower hold container with one angled side. Door is either canvas or solid.	1,225 kg	92	
LD-3	Half-width lower hold container with one angled side. Door is either canvas or solid.	1,588	82	
LD-3 Reefer	Half-width lower hold insulated container with one angled end. Door is solid.	1,588	210	



### 3.5.4 Types of Loading Devices

Common designation	Description	Max gross weight in Kg	Tare weight in Kg	ULD
LD-7	Universal general-purpose flat pallet for lower holds and main decks.	4,626	105	
LD-7	P1P base with fixed wings for overhang.	5,000	170	
LD-8	Full-width lower hold container angled at both ends. Door is canvas with built-in door straps.	2,450	127	

## 5.1.8 Airside Roadways

Driver shall obey with the following rules as well:

- Waiting or parking in the tunnel is prohibited.
- Tunnel roadways cannot be used when the red light on the gantry is activated.
- The height limit of the tunnel roadways is 4.5m.
- The vehicles listed below are not allowed in the tunnel roadways.



Fig 5.1.8 (g) Tow-tugs and Heavy Tractors weighing above 45 tonnes



Fig 5.1.8 (h) Joint Container Pallet Loaders (JCPL) Main Deck Loaders



Fig 5.1.8 (i) Tankers and Bowsers Carrying Flammable Liquid Having a Flash Point of 61 Degree Celsius



Fig 5.1.8 (j) Vehicle Transporting Radio-active, Chemical and Explosive Items

## 5.2.2 Layout of Overlapping ERA

Overlapping ERA is the area where the ERA of 2 stands overlap.

Driver shall not park the vehicle or equipment in this area prior to the arrival of aircraft or after the departure of aircraft.

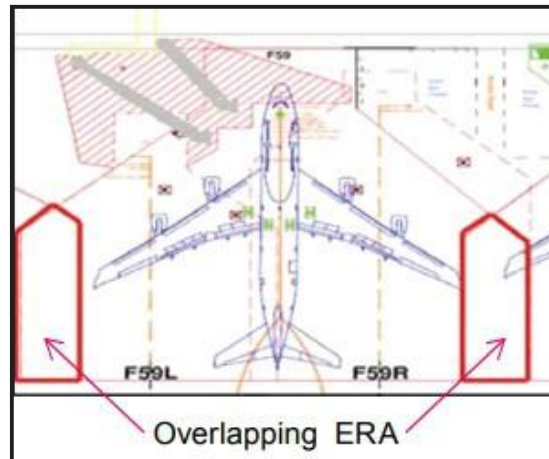


Fig 5.2.2 (a) Overlapping ERA

## 5.2.3 Equipment Restraint Area [ERA]

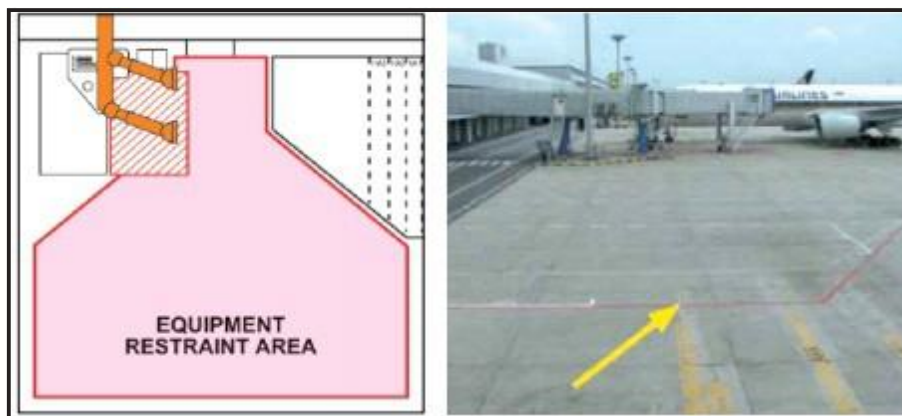


Fig 5.2.3 (a) Equipment Restraint Area

The ERA of an aircraft stand demarcates the area to be kept clear for the safe movement of an aircraft in and out of the aircraft stand. Drivers are not allowed to park or position any vehicle or ground servicing equipment within the ERA at all times, unless they are servicing an aircraft after its arrival or prior to departure.

## 5.2.4 Equipment Staging Area [ESA]

The ESA of an aircraft stand is demarcated by a continuous white line outlining the area where ground handling equipment or vehicles for the servicing of an aircraft are positioned at least 20 minutes before the arrival of the aircraft. All vehicles must be lined up in an orderly manner at all times.

### 5.3.8 Towing

Driver shall not operate a tractor with a chain of rolling stock in excess of:

#### 1. Four container trailers or baggage trolleys.

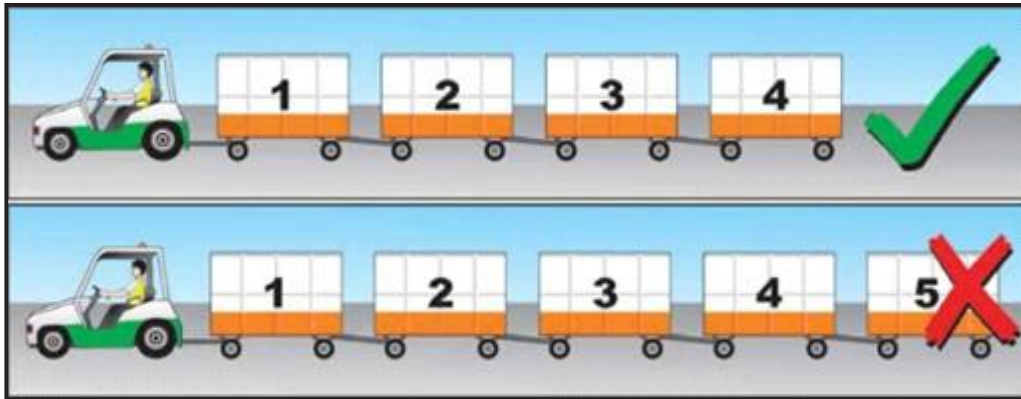


Fig 5.3.8 (a) Baggage Trolleys

#### 2. Three pallet dollies:

- Only 3 pallet dollies are allowed to be towed at any one time.
- On designated routes, exception could be given for towing of 4 pallets. Prior approval shall be obtained from CAG Airside Management.

Driver shall ensure that the container trolleys/pallets/loads are properly secured before moving off. If the container trolleys/pallets/loads are not secured, driver shall stop operations and notify his control centre for maintenance check.

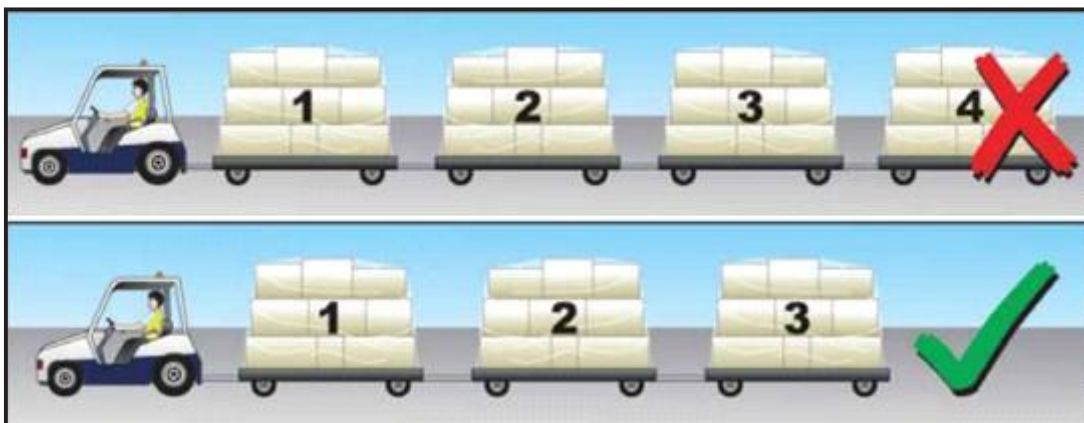


Fig 5.3.8 (b) Three Pallet Dollies

If problems are encountered during towing, driver shall stop at a location that will not affect aircraft operations and traffic flow. Driver shall then notify their respective control centres for maintenance follow-up. No vehicle shall be towed without a suitable tow bar.

### 5.4.1 Strong Winds

- Make sure that the containers are securely closed and locked on the dollies. Empty containers are more sensitive to wind and demand special attention.
- Always take care when loading empty containers in high winds.
- Wind can continually blow new FOD into the ASRA. Therefore, care must be taken throughout the turnaround and not just before the arrival and the departure of the aircraft.

### 5.4.2 Storms

Storms a few kilometers away from an airport can incur a risk and must be taken into consideration. While the source of lightning is always in storm clouds, it can strike several kilometers away from the clouds. As a general rule, if lightning is visible or thunder can be heard at the airport, then the risk must be taken into consideration.



Fig 5.4.2 (a) Storms

**Following points are should be followed:**

- In this case, refueling operations must be interrupted without delay and headset connections must be disconnected.
- In the event of strong precipitation, the cabin doors must not be left open for too long to prevent water entering into the cabin as it may create a risk of a short circuit.

### 5.4.4 Poor Visibility



*Fig 5.4.4 (a) Poor Visibility*

**The following points should be followed:**

- Only the equipment that is essential to service the aircraft must enter the ASRA in order to reduce the risk of collision. All vehicles and equipment must keep their lights “ON”.
- Always drive at reduced speed in poor visibility, when close to the aircraft.



**Skill India**  
कौशल भारत - कुशल भारत

  
सत्यमेव जयते  
GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT  
& ENTREPRENEURSHIP

  
N · S · D · C  
National  
Skill Development  
Corporation  
Transforming the skill landscape



**AASC**  
Aerospace & Aviation  
Sector Skill Council

**Address :** Hindustan Aeronautics Limited, Suranjan Das Road, Bengaluru - 560017, Karnataka.

**Email :** Contact@aasc.com

**Web :** www.aasc.in

**Phone :** +91 80-22323357

**CIN No :** 00000000

**Price:**