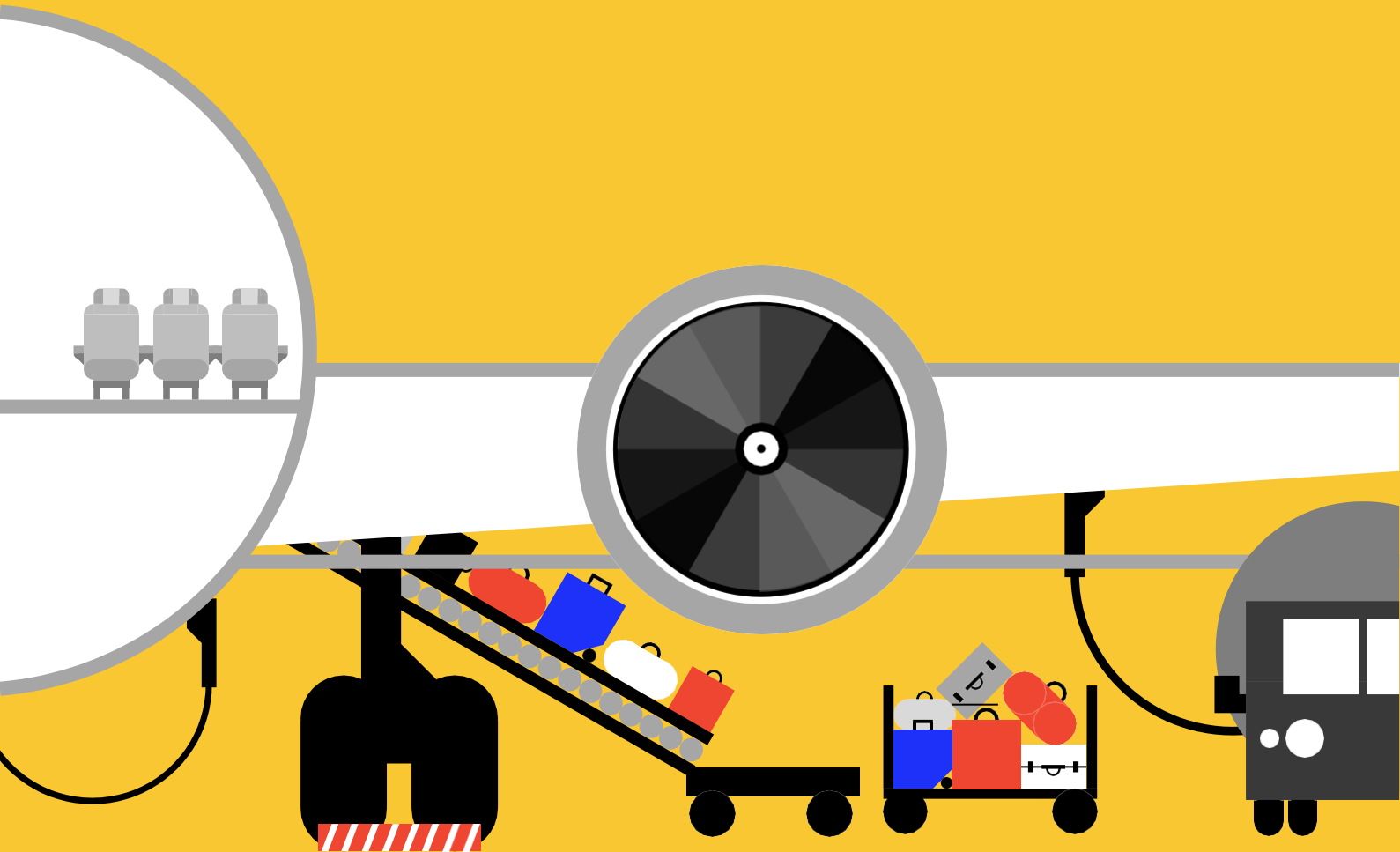




# Guidance for ground handling during and post COVID-19

Ed. 6, 12 Feb 2021



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## Revision symbols

Symbol	Meaning
□	Insertion
△	Amendment
⊗	Deletion

## Revision table

Edition number	Issue date
6 <sup>th</sup> Edition	12 Feb 2021
5 <sup>th</sup> Edition	29 May 2020
4 <sup>st</sup> Edition	08 May 2020
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## △ 1. Introduction and scope

Following the disruption caused by COVID 19, various operators and ground handling services providers (GHSP), have approached IATA seeking guidance on how to carry out certain aspects of ground handling during the pandemic as well as on how to handle various operational challenges arising.

This document provides a quick reference to the various regulatory and industry references, which we consulted and used for the development of this guidance. Further requirements may be applicable as per your local health regulation.

This document and its future updates will be posted on [www.iata.org/ground-operations](http://www.iata.org/ground-operations)

## △ 2. Ground handling during COVID-19

### □ 2.1 Industry references

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. The best way to prevent and slow down transmission is to be well informed about the COVID-19 virus, the disease it causes and how it spreads.

The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important that the practice of respiratory etiquette as well as staying informed through awareness campaigns is enhanced to personnel as a preventative measure.

When evaluating hazards that may lead to amending or developing new ground handling procedures associated with the COVID-19 pandemic, it is recommended to utilize the guidance of official organizations and industry recommendations as well as your local health authorities such as:

#### [World Health Organization \(WHO\) - Coronavirus disease \(COVID-19\) pandemic](#)

- [International Health Regulation](#)
- [Guide to Hygiene and Sanitation in Aviation](#)
- [Operational considerations for managing COVID-19 cases or outbreak in aviation](#)

#### [European Centre for Disease and Prevention and Control \(ECDC\)](#)

- [Disinfection of environments in healthcare and non-healthcare settings potentially contaminated with SARS-CoV-2](#)
- [Interim guidance for environmental cleaning in non-healthcare facilities exposed to SARS-CoV-2](#)
- [Considerations relating to social distancing measures in response to COVID-19 – second update](#)

#### [US Centers for Disease Control and Prevention \(CDC\)](#)

- [Guidance for Airlines and Airline Crew: Coronavirus Disease 2019 \(COVID-19\)](#)
- [EPA List N: Disinfectants for Coronavirus \(COVID-19\)](#)
- [Guidance for cleaning and disinfecting](#)

#### [ICAO](#)

- [CART Take-off guidance](#)
- [Public Health Corridor \(PHC\) Implementation](#)

#### [EASA](#)

- [Safety Directives and Information Bulletins](#)
- [COVID-19 Aviation Health Safety Protocol](#)
- [Guidance on aircraft cleaning and disinfection in relation to the SARS-CoV-2 pandemics](#)
- [Guidelines for the transport of cargo in passenger aircraft](#)

#### [FAA](#)

- [Regulatory Updates due to Coronavirus](#)
- [Guidance and Resources](#)

## △ 2.2. Operational and biosafety measures

**IMPORTANT** Most operational procedures remain un-changed, however multi-layered strategies and various biosafety measures are being implemented and reinforced with the aim of protecting personnel, this includes:

- (a) Good hygiene measures
- (b) Consistent use of appropriate personal protective equipment (PPE)
- (c) Cleaning and disinfection of facilities and equipment
- (d) Health monitoring, screening and testing
- (e) Vaccinations

Based on recommendations from the [OHSA regarding COVID-19](#) and [EASA Coronavirus 'SARS-CoV-2' Infections – Operational Recommendations](#), all personnel should always practice the following as much as possible:

- (a) Keep physical distance from each other and avoid spending time in crowded places or groups, whenever possible (as a minimum, a distance of 1-meter or as specified by the local health authority should be practiced).
- (b) Cover your mouth and nose with a mask when around others.
- (c) Frequently wash your hands with soap and water for at least 20 seconds.
- (d) If soap and running water are unavailable, use an alcohol-based hand rub with at least 60% alcohol.
- (e) Always wash hands that are visibly soiled.
- (f) Avoid touching your eyes, nose, or mouth with unwashed hands.
- (g) Avoid close contact with people who are sick.
- (h) Stay home and isolate from others when sick.
- (i) Routinely clean and disinfect frequently touched surfaces.

[Refer to Attachment 1: Poster in staff area.](#)

Each company should define the type of PPE their personnel shall use depending on regulations and on the risk of exposure (e.g. type of activity performed) and the transmission dynamics.

Along with the use of PPE, cleaning and disinfection of terminal buildings, infrastructure, equipment and aircraft is recommended as a means to prevent transmission of droplet through contact of surfaces that may have had droplets. Cleaning and disinfection should be done with the increased frequency and by using disinfectant effective to eliminate the virus. The effective disinfectant can be found in the [EPA List N: Disinfectants for Coronavirus \(COVID-19\) and should be define by the local health authorities.](#)

## △ 3. Ground handling recommendations

In this section, the ground handling processes are split into the key operational areas. Each section includes references specific to each ground operation area (if available) and recommended procedures

### △ 3.1 Passenger check-in, transfer, and gate handling

#### △ 3.1.1 Document sources

- [ICAO CART Take Off guidance – Airport Module](#)
- [IATA Passenger Experience & Facilitation](#)
- [Novel Coronavirus \(Covid-19\) Dangerous goods \(including alcohol based sanitizers\) guidance for Operators](#)
- [Guidance for Cabin Operations During and Post Pandemic](#)
- IGOM 10<sup>th</sup> Edition, chapter 1 and 2

#### △ 3.1.2 Passenger journey processes

- (a) According to each airport's specificities and the national legislation in place, airport terminal access could be restricted to personnel on duty, passengers and accompanying persons in situations such as for passengers with disabilities, reduced mobility or unaccompanied minors to minimize crowds and queues which would then enhance risks of transmission
- (b) As much as possible "Physical distancing" should be enforced at the different passenger touchpoints
  1. Communicate to the personnel if any new redesigned processes to promote physical distancing have been introduced, e.g. the use of retractable stanchions and floor signage in the queuing area.
  2. Consistent physical distancing measures should be applied throughout the airport
  3. Move portable boarding scanners for passengers to scan boarding cards, to avoiding the need for personnel to avoid handle boarding cards
- (c) To minimize the time spent at an airport, passenger should be encouraged to complete the check-in processes prior to arriving at the airport.
- (d) Where available, Self-service options should be utilized as much as possible at all passenger touchpoints.
  - Where baggage self-service devices are in use, airlines and/or ground handling service providers (GHSPs) should proactively guide passengers to self-bag drop options to minimize the interactions (physical handover of baggage) between passengers and check-in agents. The same principle applies to self-check-in and self-boarding devices.
- (e) Ensure that new or revised health regulations for the country of departure, transit and/or arrival are adhered to by passengers.
- (f) Report to relevant authorities of known persons wishing to travel as passengers with COVID-19 related symptoms, see WHO guidelines.
- (g) An orderly boarding process will be necessary to limit direct physical contact between passengers, especially once load- factors start increasing. Recommendation for gate agents to familiarize with specific health check requirements imposed by the transfer or destination country will assist to speed up boarding process.
- (h) At the baggage claim area during the arrival process, a speedy baggage claim process should be provided to ensure that passengers are not made to wait for excessive amounts of time in the baggage claim area.

### 3.1.3 Carriage of alcohol-based hand sanitizer in passenger and crew baggage

Carriage of Alcohol-Based Hand Sanitizer in Passenger and Crew Baggage Paragraph 2.3.5.1 of the IATA Dangerous Goods Regulations sets out the allowances for passengers and crew to have in their checked or carry-on baggage medicinal or toiletry articles, which may include articles containing alcohol as follows: 2.3.5.1 Medicinal or Toiletry Articles and Aerosols in Division 2.2 Non-radioactive medicinal or toiletry articles (including aerosols).

The term "medicinal or toiletry articles" is intended to include such items as hair sprays, perfumes, colognes, and medicines containing alcohols. Aerosols in Division 2.2, with no subsidiary hazard, for sporting or home use.

*Note: The total net quantity of all such articles carried by each passenger or crew member under the provisions of 2.3.5.1 must not exceed 2 kg or 2 L and the net quantity of each single article must not exceed 0.5 kg or 0.5 L. Release valves on aerosols must be protected by a cap or other suitable means to prevent inadvertent release of the contents. Alcohol-based hand sanitizer is acceptable under the provisions of 2.3.5.1, however, it should be noted that where passengers or crew wish to have the hand sanitizer in their carry-on baggage that the limit of 100 mL or equivalent per item for liquids and gels in accordance with the aviation security provisions applies.*



## △ 3.2 Baggage and cargo handling

### △ 3.2.1 Document sources

- [ICAO CART Take Off guidance – Airport Module](#)
- [IATA TACT Airlines Cargo Operations Status, COVID-19](#)
- [Action Cargo: COVID-19](#)
- [IATA Suspected Communicable Disease Guidelines for Cargo and Baggage Handlers](#)
- [IGOM chapter 2 AND section 4.5](#)

### △ 3.2.2 Handling of Baggage and Cargo

There are no specific measures recommended for handling of baggage and/or cargo during the pandemic, however general biosafety measures should be practiced as appropriate against the potential risk of infection. Personnel should:

- (a) Wear gloves, in combination with good hand hygiene and avoid touching your eyes, nose, or mouth with unwashed hands.
- (b) Hand hygiene should be performed frequently.
- (c) Maintain a physical distance ranging from 1-2 meters (3-6 feet) or based on the local health authorities.
- (d) Wear a mask in situations where physical distancing cannot be ensured e.g., during bulk loading.
- (e) Wear PPE as per local regulations
- (f) Not handle packages visibly dirty from body fluids.

### △ 3.2.3 Handling of special loads

- (a) Human remains transportation  
Refer to [Action Cargo: COVID-19](#) under the heading "Keeping air cargo flying" and then "Human remains transport".
- (b) Transportation of vaccines  
Loading and unloading considerations for vaccines where dry ice is present as a refrigerant should be adhered to:
  1. Verify the documentation (LIR, NOTOC, Load sheet, CPM, LDM) for the presence of dry ice as a refrigerant (code ICE).
  2. To avoid asphyxiation, prior to entering a compartment where dry ice is present, the compartment door must be opened and allow ventilation as per the company's procedures.
  3. In absence of specific instructions, it is important to wait for a minimum of 02 minutes for ventilated cargo holds and 10 minutes for non-ventilated cargo holds before entering the cargo hold compartment.
  4. A visual detectable damage check should be performed to ensure there is no damage to the packaging or ULD during loading and/or offloading.
  5. Aircraft temperature-controlled container (TCC) plays a critical role in the transport and distribution of time and temperature sensitive pharmaceutical products including vaccines. The following are some general guidance for ground handling of aircraft TCC:
    - i. Ground service providers involved in the handling of aircraft TCC should work collaboratively by coordinating and communicating with stakeholders to facilitate a well-planned and controlled operational cycle
    - ii. Aircraft TCC should only be handled by properly trained, qualified and authorized ground handling personnel
    - iii. Performance and functionalities of the aircraft TCC as well as the special handling instructions from the aircraft TCC manufacturer (e.g. checking the battery capacity and the running of temperature program) must be made available to the ground handling personnel
    - iv. The aircraft compatibility must be verified to ensure the aircraft TCC are

allowed to be loaded aboard the intended aircraft types in accordance with the aircraft WBM

- v. Aircraft TCC may be very heavy due to size and total gross weight. Appropriate handling equipment with the appropriate capacities (e.g. lift capacity of forklift, length of fork tines, size of pallet dolly) should be available to avoid potential staff injury, mishandling, equipment damage and/ or service interruption
- vi. Ground handling personnel should monitor and verify the serviceability conditions of the aircraft TCC
- vii. The normal ULD inventory procedures should be followed, and ULD stock control data should be maintained and updated accordingly. It is recommended the ULD ID Codes associated with the respective aircraft as well as the ULD positions be recorded.

Refer to Action Cargo: COVID-19 under the heading "[Guidance for Vaccines and Pharmaceutical logistics and Distribution](#)".

## △ 3.3 Ramp handling

### △ 3.3.1 Document sources

- [ICAO CART Take Off guidance – Cargo module](#)
- [IATA Public Health Emergency Response Plan](#)
- [FAA Temporary Parking of Overflow Aircraft](#)
- [IGOM chapter 3 and 4](#)

### △ 3.3.2 General

To avoid cross-contamination it is recommended GSE should be cleaned and disinfected between users.

All personnel should be educated and should practice personal hygiene principles and multi-layered protection strategies while on duty. Appropriate PPE should be worn as much as possible based on the different functions performed at the ramp.

### △ 3.3.3 Long term parking for aircraft

Depending on each airport's emergency plan, the airport may require the aircraft to proceed to a designated bay, possibly a remote bay, according to its plans and requirements.

Ensure to check on:

- (a) Spacing and distance between adjacent aircraft
- (b) Park aircraft facing into the prevailing wind direction
- (c) Available anchor points for high wind conditions
- (d) Grounding paths
- (e) Monitor and adjust for severe weather conditions
- (f) Prioritize parking on operational bay for aircraft planned for service to avoid repositioning

#### **Caution:**

In preparation for the aircraft ground movement after long term parking, anticipate the extra pull or push force required for aircraft wheels to exit the indentations in the pavement and/or to overcome the aircraft tires being out of round. This is in order to avoid shear-pin breakage and/or sudden movement in direction of travel.

### △ 3.3.4 Aircraft ground movement

Based on the airport parking plan, once restart of operations begins, it is important to ensure there is a well-coordinated aircraft movement plan to ensure there is no damage to the aircraft, equipment, facilities and/or personnel injury.

- (a) Ensure all procedures during aircraft ground movement are adhered to as documented in IGOM 10<sup>th</sup> Edition 4.6 - 4.10

IGOM 4.6 Aircraft departure defines:

- Ground staff responsibility and safety
- Pre-departure activities including communications
- Connection of the pushback vehicle
- Wheel chock removal
- Departure communication dialogue
- Maneuvering during extreme weather
- Incidents during pushback
- Pushback completion
- Re-establishing communication after departure

IGOM 4.7 to 4.10 outlines:

- Open ramp departures
- Aircraft powerback operations
- Aircraft towing activities
- Long term parking

- (b) Ensure that during any non-normal operations, a robust safety risk assessment is performed, and implementation of the mitigation plan is followed
- (c) Ensure there is a timely consultation with airport operator regarding the aircraft movement

## △ 3.4 Unit load device (ULD) handling

### △ 3.4.1 Document sources

- [ULD Regulations \(ULDR\)](#)
- [AHM911/942](#)

### △ 3.4.2 General

- (a) Before placing ULDs into storage, all Foreign Object Debris (FOD) and/or ancillary accessories not permanently attached to the ULD shall be removed from the ULDs
- (b) ULDs (except for forkliftable ULDs) shall never be stored directly on the ground but on a suitable ULD base support system
- (c) Containers shall always be stored base downwards and pallets stored horizontally
- (d) ULDs should be segregated by ULD Type Code
- (e) If ULDs of different airlines / ULD owners are stored in the same area, the ULDs should be segregated by airlines / ULD owners
- (f) Container doors must be fully restrained
- (g) To prevent environmental degradation, pallet nets and cargo straps shall not be exposed to damaging environments such as direct sunlight (U.V.), water (humidity), and freezing temperature
- (h) ULDs shall be sheltered whenever possible
- (i) Storage area for unserviceable ULDs shall be clearly marked and the damaged units segregated from serviceable units and tagged in accordance with AHM 420 Attachment 'E'
- (j) Once placed into storage, all required locks or stops shall be engaged to prevent any unintended movement of the ULDs
- (k) Do not forget to update and maintain ULD stock control data accordingly

### △ 3.4.3 Loading ULDs into parked aircraft

Airlines shall perform a safety risk assessment and refer to instructions in the aircraft Weight and Balance Manual (WBM) - even for parked aircraft.

- (a) The loading and installing of ULDs on board should only be performed by trained, qualified and authorized staff
- (b) Ensure only serviceable ULDs are loaded to avoid damages to the aircraft floor.
- (c) Follow the WBM requirements and ensure only ULDs that are approved for the intended aircraft are loaded
- (d) On parked aircraft, ULDs shall be empty.
- (e) ULDs stored on parked aircraft should be fully restrained as per WBM instructions to prevent any possible damage to the aircraft and / or ULDs caused by movement of the ULDs if the aircraft must be moved.
- (f) In the case of Cargo Loading System malfunctions, airlines shall refer to WBM – Limitations.
- (g) Follow the WBM requirements and ensure ULDs are fully engaged with the Cargo Loading System (e.g. locks are raised) in the same way as installing ULDs for a departing flight.

\*Exceptions - If the airlines can guarantee that the aircraft will remain parked without movement and/or can guarantee unrestrained ULDs will not cause any damage to the aircraft or personnel, unrestrained ULDs may be accepted on parked aircraft subject to the safety risk assessment performed by the airlines.

For Additional Information on ULD storage refer to:

- ULDR Section 6, Operating Specification 6/01, 11.4.3 for aircraft pallet storage.
- ULDR Section 6, Operating Specification 6/02, 7 for aircraft pallet net storage.
- ULDR Section 6, Operating Specification 6/04, 8 for aircraft container storage.
- ULDR Section 9, 9.3 for storage requirements and handling guidance.
- AHM 421 for storage requirements.

For additional information on ULD Serviceability Check refer to:

- ULDR Section 6, Operating Specification 6/00 for requirements for ULD Serviceability Check.
- ULDR Section 7, Standard Specification 40/3 and 40/4 for standard formats of ULD Operational Damage Limits Notice (ODLN).
- ULDR Appendix 'H' for the illustration of the ULD components listed on aircraft container and aircraft pallet ODLN.

#### △ 3.4.4 Stacking ULDs

In the case of loading and storing stacked pallets on parked aircraft, stacked pallets shall be treated in the same manner as if they were going to be carried on an operating flight, taking into account the WBM requirements. The stack is carried on a base pallet as per the following requirements (see ULDR OS 6/01 Section 8.7):

- (a) The base pallet shall be serviceable and approved by the WBM.
- (b) Only pallets of the same size or smaller size than the base pallet shall be stacked on the base pallet; if pallets of smaller size are stacked, these should all be of the same smaller size.
- (c) An intermediate floor of wooden pallets shall be laid onto the base pallet in order to leave a free space all around, on a height of at least 10 cm (4 in), this being the interface area with aircraft CLS hardware.
- (d) If nets of stacked pallets are not removed, the net of each pallet shall be disentangled and laid flat within the pallet's surface, without any part of it protruding, hanging out, or bearing on an edge rail.
- (e) Refer to the aircraft WBM, WBM Supplement, or airlines' instructions based on it, for the restraint of the stacked pallets.
- (f) Ensure a clearance of 51 mm (2 in) between the contour of the loaded pallet (pallet, pallet equipment and load items) and:
  1. The cargo door
  2. The adjacent ULD
  3. The cargo holds sidewalls and ceiling

*Note: The clearance requirement does not apply to the distance between ULD baseplates.*

#### 3.4.5 Stacking ULDs of different types

- (a) In cases of an excess of containers with smaller base size (mainly K-size base) such containers could also be loaded onto a larger size pallet and restrained by using the correct pallet net and/ or straps. For example, two AKEs can be stored on top of a PMC if proper restraint devices are used.
- (b) Before loading onto the aircraft, all rubbish and/or ancillary accessories not permanently attached to the ULD shall be removed from the ULDs. For long term storage of ULDs inside an aircraft, the ULDs must be empty and free of litter and any other items.
- (c) The last two alpha-numeric characters of the ULD ID Code indicate the owner of the ULD (see ULDR Section 4, Standard Specification 40/1; CSC Resolution 686).

## △ 3.5 Aircraft cleaning

Refer to IATA [Guidance for Aircraft cleaning and disinfection during and post pandemic](#), RTCA-DO388/EUROCAE-ED-287 Guidance Document on Aircraft Cleaning and Disinfection and IGOM 10<sup>th</sup> Edition section 3.7.

## △ 3.6 Catering handling

Refer [WHO COVID-19 and food safety: guidance for food businesses](#) and [ACA COVID-19 4Ps Guidelines are Keeping Our Industry Safe](#).

## △ 4. GSE storage

These procedures provide a quick reference and general guide for formally taking GSE Out of Operational Use (OOU), how to manage it while OOU and steps to return it to service. More details can be found in AHM 918 – Ground Support Equipment Storage and Return to Service.

### △ 4.1 Preparation

- (a) Parking GSE for a long time without taking certain basic steps can lead to potential problems and down-stream costs when it is needed again.
- (b) The primary aim of the preparations is to preserve the active GSE fleet in a safe and fully functional condition, so that it is easy and quick to return to operation and safe to use, with least possible cost.
- (c) The first point of reference for correct storage procedures should be the equipment manufacturers' (OEM) guidelines. Most GSE OEM manuals have a section describing storage procedures (which might vary depending on the storage period) that users can reference. These supersede any content of this guideline.
- (d) If local regulations and procedures are more prescriptive or do not allow the application of these best practices, then they will have precedence over this guideline.

### △ 4.2 Planning

GSE storage plans can involve either:

- (e) Complete deactivation
- (f) An "exercise" regime whereby units are started and moved according to a plan
- (g) A planned rotation of units to distribute the utilization of the fleet, or
- (h) Some combination of these strategies.

\*It is recommended to develop a GSE fleet storage strategy together with a return to service plan.

## △ 4.3 Actions

- (a) Park GSE in a centrally controlled area.
- (b) Ensure all doors and windows are closed and secured unless climatic conditions allow for vents to be open to allow for air circulation without risk of infestations, mold etc.
- (c) Ensure exposed operational panels are covered to protect them from various climatic conditions
- (d) Inflate all tires to the maximum recommended pressure – unless the unit is to be stored on blocks with wheels off the ground
- (e) Ensure all fluids are at the correct level unless the manufacturer's documentation indicates otherwise.
- (f) Where possible, chock the vehicle to prevent it rolling. Decision to set the parking brake or not is to be guided by manufacturer documentation, experience with the specific piece of equipment, nature of the parking area in terms of slope etc.
- (g) Minimize exposed lengths of hydraulic cylinder rods by moving all platforms, booms, stabilizers etc. such that the rods are in the fully retracted position.
- (h) If possible, coat exposed hydraulic rams with a preserving fluid or grease.
- (i) Protect unpainted metal surfaces such as roller chains, lift chains, sprockets with rust preventative.
- (j) Drain air brake tanks of all water residue.
- (k) If GSE is equipped with telematics, disconnect the main batteries to avoid draining the battery when in storage.
- (l) Ensure all ignition / power systems are off or isolated.
- (m) Protect against unauthorized usage by removing keys (if keyed ignition) or by appropriate kits to lock out/ tag out.
- (n) For potable water truck tanks – Refer to WHO guidance and IATA IDQP policy - see Airport Handling Manual (AHM 440).
- (o) For lavatory unit tanks – these should be emptied, cleaned and left to air dry with hatch left partially open but covered to prevent ingress of any foreign objects.
- (p) For fuel truck tanks – Refer to local safety regulations. Could depend on type of fuel stored. If tanks are emptied, they should also be degassed to remove any flammable gasses.
- (q) For towbars, grease where appropriate (especially for moving mechanisms such as towbar head-locks pins, etc.) and cover properly to avoid any corrosion.

**\*Caution:** Plastic sheeting creates condensation which can lead to rust and pitting of metals as well as deterioration of electronic components and electrical contacts.

## △ 4.4 During storage

### △ 4.4.1 General

- (a) Follow your storage plan.
- (b) GSE under different storage / parking regimes should be identified to ensure only those intended for use are used. This can be accomplished by means of tags, key controls, differentiated parking areas or similar control measures.
- (c) Fix units when they breakdown whenever possible.
- (d) Avoid cannibalization of parts, as much as possible.
- (e) If possible, under the local circumstances, consider using this time to catch up on maintenance and repairs.
- (f) If possible, check all stored units weekly for overall state of readiness.
- (g) If not already done as part of the Preparations phase, develop a return to service plan based on the storage plan. Ensure sufficient stock of fluids, filters and other spare parts is on hand at the commencement of return to service so the process can run smoothly and not cause service delays.

### 4.4.2 Lithium batteries

Depending on the condition of the batteries and the initial charge level, these batteries could be good for up to 6 months with no charging. After that they should be checked for charge levels.

### 4.4.3 Lead-acid batteries

- (a) Check water levels and freshen charge of the batteries at least every 3 months but more frequently if possible.
- (b) Check lead-acid batteries for build-up of corrosive powders at terminals and around the battery cells, clean as necessary.

### 4.4.5 Fleet management systems and data

- (a) In terms of PMI (preventive maintenance and inspection) consider revising the maintenance schedule when GSE is placed in storage to account for it being out of use.
- (b) A record should be kept of all that was done to each unit when it was put into storage. Record should also be kept of each time the unit is exercised or rotated with another unit. This will facilitate a quick return to service with reliable equipment.

## △4.5 Return to service

A GSE return to service e-learning course is available at:

<https://www.iata.org/en/training/courses/ground-support-equipment/talp59/en/>

### △ 4.5.1 Planning and preparation

- (a) The actions necessary to return GSE to full-time service depends on how long the unit was stored, how it was stored as well as whether or not it was rotated or “exercised” during the storage period.
- (b) Plan to start returning units to service ahead of actual return of air traffic so that there are enough units to meet initial days’ demand. Include in the plan the need to reinstate GSE maintenance staff early to enable timely completion of critical return to service activities.
- (c) At airports where there are significant numbers of parked aircraft, be prepared for the need for aircraft tow tractors / pushback tractors ahead of the return of air traffic.
- (d) Put in place measures to ensure cleanliness of high common use touchpoints on GSE.
- (e) Ensure adequate supplies of parts and fluids that are expected to be needed to reinstate out of operational use (OOU) GSE are on hand prior to starting the return to service program.
- (f) Ensure Airside Vehicle Passes (AVPs) are valid for the GSE that are being returned to service.
- (g) Ensure that all GSE personnel who will need operator / driver licenses and access permits for the airside and the GSE storage areas will have these available in time or that arrangements have been made for validity extensions, before the start of the return to service program.
- (h) Ensure that all necessary training / recurrent training has been done and/or necessary arrangements have been made for validity extensions.

### △ 4.5.2 Return to service safety and functional check

As a minimum, it is strongly recommended that all GSE that is returned to service should have a full safety and functional check completed by qualified and competent GSE maintenance staff. The check should include:

- (a) Where available and the storage period was long enough to trigger it, utilize the Equipment Pre-operational Checklist or similar document from the manufacturer.
- (b) Walk around the equipment, check for nests, blocked intake and exhaust pipes, flat tires, chewed wires, hoses, fuel lines, evidence of leaks and any other obvious signs that the equipment is not ready for use.
- (c) Ensure battery terminals are correctly connected in terms of polarity.
- (d) Check the OEM manual before “jump starting” or boosting the battery from an outside power source to avoid possible costly damage to electronic systems due to voltage spikes / surges.
- (e) Before starting / moving the equipment, check tire pressures, and all fluid levels. Remove blocks if GSE was stored with wheels off the ground.
- (f) If the engine, transmission and / or hydraulic systems were treated for long term storage, follow the reinstatement to service procedures specified by the preservative protocol / OEM manual.



- (g) Clean off any sliding surfaces such as rams etc. that have been coated with preservatives.
- (h) Check OEM manuals regarding towing procedures prior to towing any disabled GSE.
- (i) Once the unit is started, allow the brake system to build up to operating pressure (air brakes).
- (j) Move off very slowly and apply brakes within a meter or so to ensure brakes are working.
- (k) During a short drive, check for unusual noises, unusual smells (e.g. burning), pulling to one side during pull off / driving / braking, erratic power delivery, amongst others. Stop and check for any leaks, smoke etc.
- (l) For GSE fitted with any proximity sensing and warning systems, check that these are operating correctly before servicing an aircraft.
- (m) Start and run air conditioning units (ACUs) to atmosphere and air supply units (ASUs) in bypass mode before connecting to an aircraft to ensure no debris (e.g. bird nests etc.) that might have entered the hoses or ducts, gets blown into the aircraft ducts.
- (n) As GSE is returned to service, ensure the GSE parking / storage area is cleared of all debris such as improvised chocks, discarded materials etc. so that the area is not a source of FOD.
- (o) Reinststate the normal PMI program as units return to operation.
- (p) For procedures on returning fuel trucks to service, please refer to JIG - Bulletin No 128 - Placing equipment into care as part of pandemic response.

#### △ 4.5.3 Potable water truck tanks

For potable water truck tanks, the following guidelines and references have been provided by the IATA Drinking-Water Quality Pool (IDQP):

- (a) All tanks, hoses and accessories shall be cleaned according to the usual procedures in effect under normal operations.
- (b) Ensure all devices are re-installed on the vehicle e.g. level indicator, filter support.
- (c) Water sampling shall be done and passed according to usual procedures in effect under normal operations.
- (d) Re-instate the normal record keeping regime.

## △ 5. Training

### △5.1 Document Source

- AHM 1100
- AHM 1111

### 5.1 Human performance

Our staff is our biggest asset and every company has a duty to protect them and support them during these difficult times. It is important to remember that many people are worried about their health, reduced hours, employment uncertainty - all while they are conducting an operational task, which might have been changed due to the COVID-19 measures or new tasks they have not performed before e.g. parking of aircraft in close proximity to others. In order to mitigate and reduce the likelihood of any unwanted event during both routine and non-routine operations, a risk-based approach is recommended.

### 5.2 Daily briefs and updates

It is recommended that suitable information and appropriate updates are provided to the work force at a suitable frequency to both maintain engagement and promote safety awareness. It should include but not be limited to:

- (a) changes introduced by new regulations on COVID-19.
- (b) organizational and management changes / updates.
- (c) new or amended procedures during the COVID-19.
- (d) health and safety actions.
- (e) hygiene routines reminders.
- (f) human factors.
- (g) safety tips.
- (h) safety stand down modules for "Attention to Detail and Distraction Management".
- (i) injuries, accidents.
- (j) emergency responses.
- (k) While some of the measure such as hygiene routines should be included into training.

### 5.3 Initial training

No person may perform a task for which they do not hold a record of training. There shall not be any exemption or reduction in content and initial training needs to be conducted in full as per the company training program or, as a minimum, according to the ground operations training program as specified in AHM Ch. 11.

It is unlikely in the current circumstances that companies will be hiring new employees, but when return to operations is initiated, it shall mean any new hire employees shall require the training to perform their tasks for they have been employed.

### 5.4 Recurrent training

Where a competent authority defines recurrent period then this shall be met as a minimum. Where a recurrent period is not defined, it is recommended to apply the industry standard as per AHM Ch. 11 and the recurrent training shall take place within the next 36-months at the latest.

A company should track the training validity on a daily or weekly basis for staff on duty, off-duty as well as for staff on reduced hours and temporary leave to be able to monitor and evaluate the training needs and provide training sessions in due time.

Each company should prepare a training plan, taking into consideration the type of employment regime employees are subject to as well as current and future manpower needs. To ensure sufficient trainer availability for the station's needs, each organization should review trainer resources vs. manpower.

It is recommended to keep training current for as many staff as possible. For employees currently working as part of a reduced workforce, it should be the aim to maintain these employees' training status as "current" where there are resources to do so.

## △5.5 Training currency extension

The primary aim shall be to keep the qualification valid where staff is still actively involved in aircraft handling. If this is not feasible due to inability to travel, absence of trainer etc., an organization may, based on its own safety risk assessment of specific function(s), decide on a longer recurrent training interval, provided that such recurrent training interval shall comply with the regulatory requirements.

Any training which is required and timed under national law, such as dangerous goods, security, can be only alleviated by the competent national authority. While IATA lobbies on behalf of its members with various regulators, it is essential that companies seek any exemption from this type of training directly with their national authority. The list of States that issued a temporary extension for the Dangerous Goods training can be found on [here](#).

The extension period varies between 3 to 6 months, depending on the type of training, and risk assessment done by an organization or a regulator according to their Safety Management Systems. This exception from a standard procedure needs to be documented. In some countries, such extension might require approval by the national authority as per their guidelines.

Once any extension period has been completed and recurrent training takes place, the standard recurrent period should be applied from the date of the recurrent training. Example: If a training that expired in 04/2020 is extended and the recurrent training is only conducted in 07/2020, the next recurrent training following would follow standard recurrent period is due again in 07/2023 (assuming a three-year recurrent frequency)

*Note: The recurrent period within the IOSA and ISAGO audit programs is in general a maximum of 36 months. Refer to each audit program for specific requirements.*

## △5.6 Training methods

Traditionally, theoretical training has been delivered face to face in a classroom setting which may not be possible at this time. The biggest focus should be given to alternative methods of training such as: Use of a "remote/virtual" classroom with appropriate technology. Where appropriate technology is not present, the learner's notes can be distributed to personnel and time allowed for "self-study".

These methods allow complete training remotely (e.g. from home), at any time, on any time zone and it reduces demands on trainers' availability.

If companies set up such training in advance, it will help them to manage the expected big training demand for newly hired staff once traffic starts to return. However, it is important to stress that these methods will not replace the practical element of the training and On the Job Training, competence assessment etc. that will need to take place as our personnel return to work.

## 5.7 Absence from work

Many staff are on various types of leave. Once they return to work, it is a company's duty to bring all employees up to speed and ensure their competency and operational readiness.

Staff on temporary or other type of leave of absence should be treated in the normal return to work manner as highlighted in AHM Ch 11 para 6, Period of Absence Table. It includes briefs, On the Job Training, requalification training and depends on the period of absence.

Period of Absence	Action
Up to 3 months	Brief the employee on any procedural, organizational, or equipment/infrastructure updates/changes that might have occurred during their absence. The briefing shall be documented and filed accordingly.
Between 3 and 12 months	Brief the employee on any procedural, organizational, or equipment/infrastructure updates/changes that might have occurred during their absence. The briefing shall be documented and filed accordingly. Additionally, deliver On Job Training to ensure competence has been maintained. Should any gaps in competence be identified, a period of requalification training shall be initiated.
Between 12 and 24 months	Brief the employee on any procedural, organizational, or equipment/infrastructure updates/changes that might have occurred during their absence. The briefing shall be documented and filed accordingly. Additionally, deliver requalification training, including a documented, formal assessment of competence, as per initial training, in order to confirm the employee remains competent to perform that role.
More than 24 months	Initial training program(s) to be delivered.

## 5.8 Training for cargo transported in passenger cabin

Many of the operators are changing passenger aircraft to cargo aircraft or are transporting cargo in the passenger cabin. It is important that load control personnel, as well as cargo and ramp staff are properly trained for these operations. Such training should come from the relevant operator, based on their own procedures.

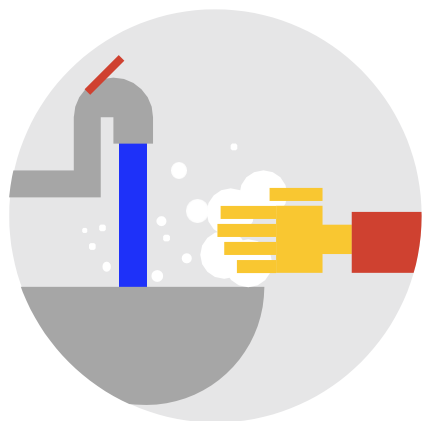
For more information, please [see Guidance for Safe Transportation of Cargo in Passenger Cabin](#) posted on [IATA Ground Operations page](#).

## Inquiries and Feedback

This document will be updated regularly as we receive input and updates from our stakeholders. Please send any further questions, recommendations, or inquiries to [groundops@iata.org](mailto:groundops@iata.org)

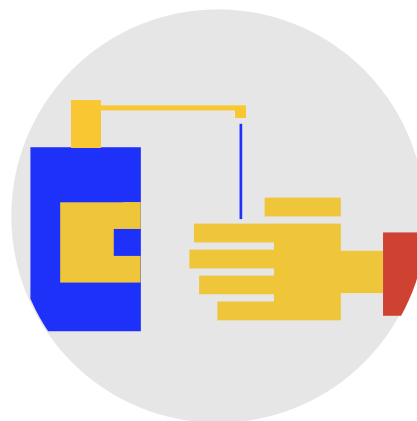
# Attachment 1: Poster in staff area

## Instructions for ground handling staff biosafety during COVID-19



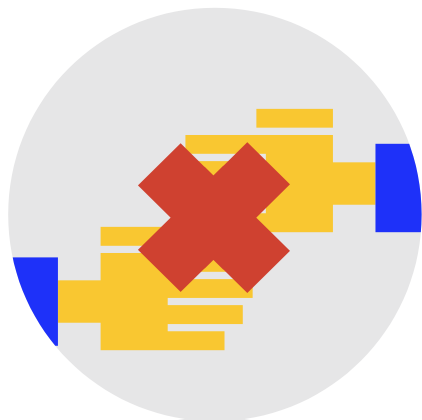
### Regularly wash your hands

Use liquid soap and water to wash your hands for at least 20 seconds every time you enter the building.



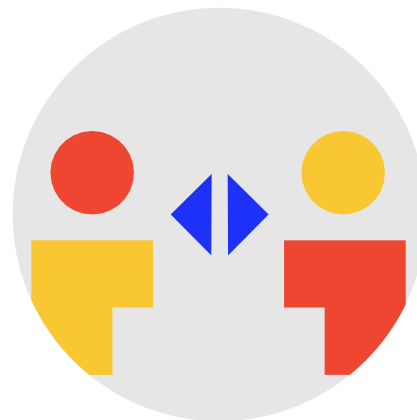
### Disinfect

When handwashing is not possible, disinfect your hands with an alcohol-based hand rub.



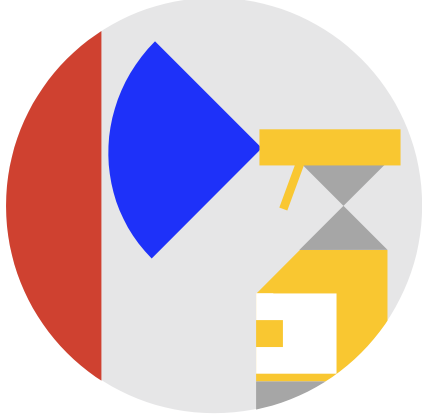
### Avoid shaking hands

Remember that the virus spreads through coughing and sneezing via airborne droplets, as well as through direct contact.



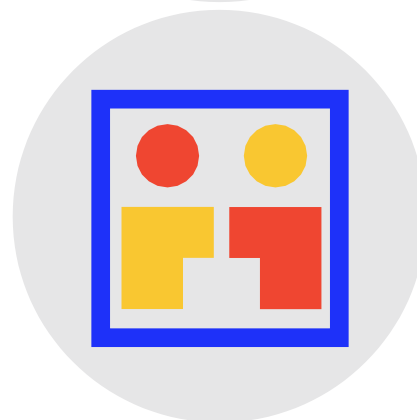
### Respect physical distancing

Maintain a safe distance from others by following floor markings or other indicators. Drivers to stay in their vehicles until instructed and follow local procedures.



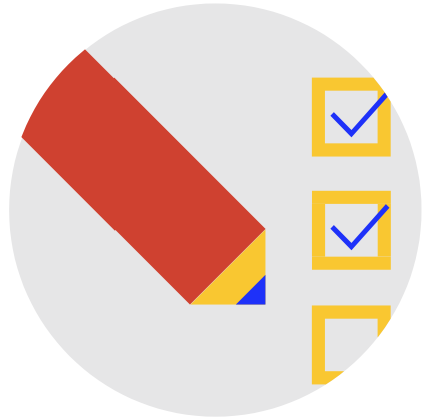
### Clean regularly

Disinfect all frequently touched surfaces and all the equipment between uses.



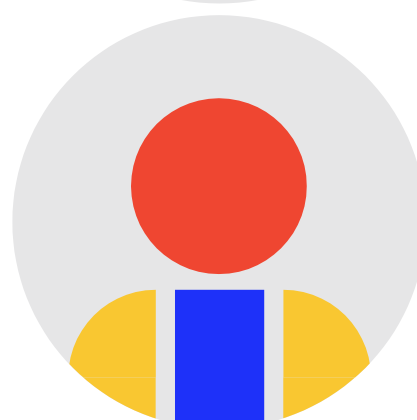
### Maintain the distance

Avoid entering enclosed rooms with other people present or wear appropriate personal protective equipment.



### Use your own pen

Ensure you don't touch others' pens when signing documentation.



Follow any company, local or national guidance and regulations, especially if you show potential symptoms.

**BE RESPONSIBLE.  
STAY SAFE.**

