Section 6 — Ground Handling Operations (GRH)

Applicability

Section 6 addresses functions within the scope of ground handling operations and is applicable to an operator that conducts passenger, cargo and/or combi (combined cargo and passenger) aircraft operations.

Individual GRH provisions or sub-specifications within a GRH provision that:

- Do not begin with a conditional phrase are applicable unless determined otherwise by the Auditor.
- Begin with a conditional phrase ("If the Operator...") are applicable if the Operator meets the condition(s) stated in the phrase.

Functions within the scope of ground handling operations include:

- Passenger handling;
- Baggage handling;
- Aircraft ground handling and loading;
- Load control;
- Aircraft fuelling;
- Aircraft de-/anti-icing.

In this section, non-revenue cargo is addressed in the same way as revenue cargo for the purposes of handling loading, securing and transporting. COMAT is non-revenue cargo.

For the purpose of addressing cargo in this section, mail is considered to be an item of cargo. Therefore, any reference to cargo also includes mail.

Where an operator outsources the performance of ground handling operational functions to external service providers, the operator retains overall responsibility for ensuring the management of safety in the conduct of such operations and must demonstrate processes for monitoring applicable external service providers in accordance with GRH 1.10.2.

General Guidance

Definitions of technical terms used in this ISM Section 6, as well as the meaning of abbreviations and acronyms, are found in the IATA Reference Manual for Audit Programs (IRM).

△ Processes and procedures for use in ground handling operations are defined in the IATA Ground Operations Manual (IGOM), the IATA Airport Handling Manual (AHM), the Dangerous Goods Regulations (DGR) and in other relevant IATA publications.

Due to revision cycle differences, the IATA documents cited above are typically revised at various times during the effective period of an ISM edition. Accordingly, when an IATA document is revised, it could render an existing reference to specific information in an IATA document to be in error. In such case, the revised IATA document would have to be searched to find the specific information referenced.

1 Management and Control

1.1 Management System Overview

GRH 1.1.1

The Operator shall have a management system that ensures control of ground handling operations and the management of safety and security outcomes. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** management system structure for ground handling operations.
- ☐ **Interviewed** manager(s) of ground handling operations.

- ☐ **Assessed** status of conformity with all other GRH management system ISARPs.
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Ground Handling, Operations and Operator.

Refer to Guidance associated with ORG 1.1.1 located in ISM Section 1.

GRH 1.1.2

The Operator shall have a manager for ground handling operations that:

(i) Has the authority and is responsible for the management and supervision of functions and activities within the scope of ground handling operations;

(ii) Is responsible for the management of safety and security risks to ground handling operations. **(GM)** ◄

Auditor Actions

- ☐ **Identified** designated/nominated manager for ground handling operations.
- ☐ **Examined** job description of manager for ground handling operations (focus: defines authority/accountability/responsibility for ground handling operations risk management/compliance with AOC requirements).
- ☐ **Interviewed** manager of ground handling operations.
- ☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 1.1.3 located in ISM Section 1.

1.2 Accountability, Authorities and Responsibilities

GRH 1.2.1

The Operator shall ensure the management system defines the safety accountability, authorities and responsibilities of management and non-management personnel that perform functions relevant to the safety and/or security of ground handling operations. The management system shall also specify:

(i) The levels of management with the authority to make decisions regarding risk tolerability with respect to the safety and/or security of ground handling operations;

(ii) Responsibilities for ensuring ground handling operations are conducted in accordance with applicable regulations and standards of the Operator;

(iii) Lines of accountability throughout ground handling operations, including direct accountability for safety and/or security on the part of ground handling operations senior management. **[SMS] (GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** defined safety accountability/authorities/responsibilities (focus: applicable to management/non-management personnel throughout the ground handling operations organization).
- ☐ **Interviewed** ground handling operations manager and/or designated management representative(s).
- ☐ **Examined** job descriptions of selected management/non-management personnel in ground handling operations (focus: defines authority/accountability/responsibility for roles/positions in ground handling operations).
- ☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 1.3.1 located in ISM Section 1 for expanded information regarding accountability, authority and responsibility as applicable to management and non-management personnel.

GRH 1.2.2

The Operator shall have a process or procedure for the delegation of duties within the management system for ground handling operations that ensures managerial continuity is maintained when operational managers including, if applicable, post holders are unable to carry out work duties. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** processes for delegation of duties when ground handling operational managers (or, if applicable, post holder) are absent (focus: processes maintain managerial continuity during periods when operational managers are absent).
- ☐ **Interviewed** ground handling operations manager and/or designated management representative(s).
- ☐ **Examined** example(s) of delegation of duties due to absence of operational manager(s).
- ☐ **Other Actions** (Specify)

Guidance

The intent of this provision is for an operator to have a process or procedure that ensures a specific person (or perhaps more than one person) is identified to assume the duties of any operational manager that is or is expected to be, for any reason, unable to accomplish assigned work duties.

For the purpose of this provision, the use of telecommuting technology and/or being on call and continually contactable are acceptable means for operational managers to remain available and capable of carrying out assigned work duties.

Refer to Guidance associated with ORG 1.3.2 located in ISM Section 1, which addresses the performance of work duties and the use of telecommuting technology and/or being on call and continually contactable.

1.3 Communication

GRH 1.3.1

The Operator shall have a system that enables effective communication of relevant safety and operational information throughout the ground handling operations management system and in all areas where ground handling operations are conducted. Such system shall ensure:

(i) Personnel maintain an awareness of the SMS;

(ii) Safety-critical information is conveyed;

△ (iii) If applicable, external service providers are provided with information relevant to operations conducted. **[SMS] (GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** system(s) for communicating information relevant to operations within the ground handling operations organization (focus: capability for communicating information relevant to operations within the ground handling operations organization).
- ☐ **Interviewed** ground handling operations manager and/or designated management representative(s).
- ☐ **Examined** examples of information communication/transfer in ground handling operations.
- ☐ **Interviewed** selected non-management operational personnel in ground handling operations.
- ☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 4.2.1 located in ISM Section 1 for expanded information regarding methods of communication.

1.4 Provision of Resources

GRH 1.4.1

The Operator shall ensure the existence of the necessary facilities, workspace, equipment and supporting services, as well as work environment, to satisfy ground handling operational safety requirements. **(GM)** ◄

Note: *Conformity with this provision does not require specifications to be documented by the Operator.*

Auditor Actions

- ☐ **Observed/Assessed** physical resources and services (focus: adequacy to meet needs of ground handling operations).
- ☐ **Identified/Assessed** processes for oversight of external ground service providers (focus: evaluation of facilities/workspace/equipment/supporting services).
- ☐ **Interviewed** ground handling operations manager and/or designated management representative(s).
- ☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 1.5.2 located in ISM Section 1.

Implementation (i.e. adequacy of physical resources and work environment) is typically assessed through observations made by the auditor during the course of the on-site audit.

△ **GRH 1.4.2**

The Operator shall have a selection process for management and non-management positions within the ground handling organization that require the performance of functions relevant to the safety or security of aircraft operations. Such process shall ensure candidates are selected on the basis of knowledge, skills, training and experience appropriate for the position. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** standards and processes for selection of ground handling operations personnel in functions relevant to safety and security of aircraft operations.
- ☐ **Interviewed** ground handling operations manager and/or designated management representative(s).
- ☐ **Interviewed** personnel that perform ground handling functions relevant to the safety or security of aircraft operations.
- ☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 1.5.3 located in ISM Section 1.

To ensure the inclusion of all ground handling operations, an operator would typically have a process that ensures specifications in this provision are applied to external ground handling service providers.

A corporate personnel selection policy that applies to all operational areas of the organization serves to satisfy specifications in this provision.

1.5 Documentation System

△ **GRH 1.5.1** (Intentionally open)

□ **GRH 1.5.2** (Intentionally open)

△ **GRH 1.5.3**

The Operator shall have a system for the management and control of documentation and/or data used directly in the conduct or support of ground handling operations. Such system shall ensure documentation:

(i) Meets all required elements specified in Table 1.1;

(ii) Contains legible and accurate information;

(iii) Is presented in a format appropriate for use in operations. **(GM)** ◄

Auditor Actions

- □ **Identified/Assessed** system(s) for management/control of content/format of operational documentation/data used in ground handling operations.
- □ **Interviewed** responsible management representative(s).
- □ **Examined** selected parts of the ground handling OM (focus: legibility/accuracy/format; approval as applicable).
- □ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Documentation, Electronic Documentation and Paper Documentation. Refer to ORG 2.5.1 and associated Guidance, and Table 1.1, located in ISM Section 1.

1.6 Operational Manuals

GRH 1.6.1

The Operator shall have an Operations Manual, which may be issued in separate parts, that contains the operational policies, processes, procedures and other information necessary for ground handling personnel to perform their duties and be in compliance with applicable regulations, laws, rules and standards of the Operator. **(GM)**

Auditor Actions

- □ **Identified/Assessed** ground handling OM or, if applicable, separate documents that comprise the OM.
- □ **Interviewed** responsible management representative(s).
- □ **Examined** selected sections or parts of the ground handling OM (focus: policies, processes, procedures used by ground handling personnel are included).
- □ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of Operations Manual (OM).

An OM typically includes guidance that addresses areas generic to all functions within the scope of ground handling operations, as well as parts of the manual that are specific to individual operational functions.

Because the scope of ground handling operations is broad and varies by operator, rather than publishing one OM just for ground handling, a smaller operator might choose to incorporate the relevant information into a larger, comprehensive OM.

An operator could also choose to issue the information in separate documents that are each specific to the various ground handling operational functions (e.g. passenger handling, baggage handling, aircraft handling). Each individual document would typically contain generic guidance that is applicable to all ground handling operational functions (e.g. organizational policies, general definitions), as well as guidance that is specific to the particular ground handling function or office location (e.g. process descriptions, standard operating procedures, references to the appropriate regulations and IATA manuals).

GRH 1.6.2

The Operator shall ensure the current edition of the Operations Manual is available in a usable format at each location where ground handling operations are conducted. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** process for ensuring distribution of the ground handling OM to all locations where ground handling operations are conducted.
- ☐ **Interviewed** responsible management representative(s).
- ☐ **Observed** availability of OM in usable format in selected areas of operations.
- ☐ **Traced** distribution of revision(s) to ground handling OM to locations where ground handling operations are conducted.
- ☐ **Other Actions** (Specify)

Guidance

If an operator has external organizations conduct ground handling operational functions, such operator would then be expected to have a monitoring and control process to ensure each external organization either uses the OM of the operator or has its own published OM that fulfills operational safety, security and quality requirements of the operator.

To achieve system-wide standardization, an operator would normally have a control process that ensures external service providers have operationally relevant parts of the OM available at applicable locations.

△ **GRH 1.6.3**

If the Operator transports dangerous goods as cargo, the Operator shall ensure a current edition of the Dangerous Goods Regulations (DGR), the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Technical Instructions) or equivalent documentation is accessible at each location where ground handling operations involving the loading of dangerous goods as cargo are conducted. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** process for ensuring distribution of DGR or equivalent DG documents to all locations where DG is handled.
- ☐ **Interviewed** responsible management representative(s).
- ☐ **Traced** distribution of DGR or equivalent DG documents.
- ☐ **Observed** accessibility of DGR or equivalent DG documents in areas of operations where dangerous goods are handled.
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Dangerous Goods Regulations (DGR) and Technical Instructions.

Most dangerous goods are typically transported as cargo. However, certain types of dangerous goods are permitted for transport in passenger or crew baggage. The specifications in this provision are applicable to an operator that transports dangerous goods as cargo.

Acceptable equivalent documentation would typically contain information derived from the DGR or Technical Instructions, as well as the dangerous goods policies and procedures specific to the type(s) of operations being conducted at the location.

GRH 1.6.4

If the Operator transports dangerous goods as cargo, the Operator shall ensure the OM or an equivalent operational manual contains information that will permit ground handling personnel to carry out duties and responsibilities with respect to dangerous goods. Such information shall include, as a minimum:

(i) Action to be taken in the event of emergencies involving dangerous goods;

(ii) Details of the location and identification of cargo holds;

△ (iii) The maximum quantity of dry ice permitted in each hold;

(iv) If radioactive material is transported, instructions for the loading of such dangerous goods in accordance with applicable requirements. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** information in the OM or equivalent document that permits personnel to carry out duties and responsibilities relevant to dangerous goods handling.
- ☐ **Interviewed** responsible management representative(s).
- ☐ **Interviewed** personnel that perform operational functions in ground handling operations.
- ☐ **Observed** accessibility of DG information on key cargo (dry ice and radioactive material) in selected areas of operations where personnel carry out dangerous goods handling.
- ☐ **Other Actions** (Specify)

Guidance

Guidance may be found in DGR 1.4.2.

GRH 1.6.5

If the Operator does *not* transport dangerous goods as cargo, the Operator shall ensure the OM contains the policies and associated guidance necessary to prevent dangerous goods from being inadvertently carried or loaded onto the aircraft. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** policies and guidance in the ground handling OM or equivalent manual necessary to ensure personnel do not inadvertently permit loading or transport of dangerous goods on aircraft not approved or used for such transport.
- ☐ **Interviewed** responsible management representative(s).
- ☐ **Interviewed** personnel that perform operational functions in ground handling operations.
- ☐ **Observed** availability of policies and guidance that ensures personnel do not inadvertently permit dangerous goods to be carried or loaded onto aircraft not approved or used for the transport of dangerous goods.
- ☐ **Other Actions** (Specify)

Guidance

An operator requires specific approval to transport dangerous goods as cargo. In some cases, an operator might have approval to transport dangerous goods as cargo but actually transports dangerous goods only on certain aircraft. For example, an operator that conducts flights with passenger and cargo aircraft might transport dangerous goods only in its cargo aircraft and not in its passenger aircraft.

The intent of this provision is for an operator that does not transport dangerous goods as cargo, or does not transport dangerous goods as cargo on certain aircraft in its fleet, to have policies and associated guidance in the OM to ensure personnel are able to identify and reject undeclared dangerous goods (including COMAT classified as dangerous goods) from being loaded or transported on aircraft in its fleet that are not approved or used for such transport.

Guidance in an operator's OM typically addresses vigilance with respect to hidden or inconspicuous dangerous goods and includes an indicative list of items that could contain or be classified as dangerous goods.

GRH 1.6.6

If the Operator conducts passenger flights, the Operator shall ensure the following information is accessible at locations where passenger check-in and/or boarding operations are conducted:

△

(i) A current edition of the Dangerous Goods Regulations (DGR) or the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Technical Instructions) or equivalent documentation;

(ii) A listing or schedule of operator-approved dangerous goods permitted to be carried on board the aircraft by a passenger or crew member. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** process for ensuring distribution of DGR or equivalent DG documents, including a listing of operator-approved dangerous goods permitted for carriage by passenger/crew member, to all locations where passenger check-in and/or boarding are conducted.
- ☐ **Interviewed** responsible management representative(s).
- ☐ **Traced** distribution of DGR or equivalent DG documents, including a listing of operator-approved dangerous goods permitted for carriage by passenger/crew member, to areas where passenger check-in and/or boarding operations are conducted.
- ☐ **Observed** accessibility of DGR or equivalent DG documents, including a listing of operator-approved dangerous goods permitted for carriage by passenger/crew member, in areas of operations where passenger handling operations are conducted.
- ☐ **Other Actions** (Specify)

Guidance

△ Most dangerous goods are typically transported as cargo. However, certain types of dangerous goods are permitted in passenger or crew baggage.

Acceptable equivalent documentation would typically contain information derived from the DGR or Technical Instructions, as well as the dangerous goods policies and procedures specific to the type(s) of operations being conducted at the location. For example, at the passenger check-in and aircraft boarding areas, appropriate company documentation (to include listing or schedule) might describe dangerous goods permitted in passenger and crew baggage. Such documentation may also include actions required by passenger agents with respect to items specifically not permitted in passenger baggage and contain examples of dangerous goods hazard labels and procedures for addressing spills and/or leaks of unidentified substances.

Dangerous goods permitted to be carried on board by a passenger or crew member as specified in item (ii) are identified in the DGR, Table 2.3.A, and in the Technical Instructions, Table 8.1.

To ensure system-wide standardization, an operator would normally have a control process to ensure external service providers have the DGR or equivalent documentation available at applicable locations.

GRH 1.6.7

If the Operator conducts passenger flights, the Operator shall ensure the OM or an equivalent operational manual contains information that will permit ground handling personnel to carry out duties and responsibilities with respect to dangerous goods. As a minimum, such information shall include procedures to alert passengers that certain items of dangerous goods:

(i) Are specifically prohibited in hold baggage;

(ii) Must be removed from cabin baggage when cabin baggage is transported as hold baggage. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** information in the ground handling OM relevant to personnel alerting passengers of dangerous goods restrictions and prohibitions.
- ☐ **Interviewed** responsible management representative(s).
- ☐ **Observed** personnel advising passengers of DG limits in ground handling operations.
- ☐ **Other Actions** (Specify)

Guidance

△ Refer to IGOM 1.1.6.4 for guidance that addresses dangerous goods in baggage.

GRH 1.6.8

If the Operator conducts passenger flights, the Operator *should* ensure the OM or an equivalent operational manual contains information with respect to dangerous goods permitted in passenger and crew baggage. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** information in the ground handling OM relevant to dangerous goods permitted in passenger and crew baggage.
- ☐ **Interviewed** responsible management representative(s).
- ☐ **Interviewed** line flight and cabin crew members.
- ☐ **Other Actions** (Specify)

Guidance

Certain items of dangerous goods are permitted in passenger or crew baggage if approved by the operator. Information contained in the operations manual (or equivalent) would typically address the following:

- Approval process

  It is recommended that a single company policy be set out that identifies the items that have been approved and the person(s) or department(s) responsible for determining how dangerous goods in passenger baggage may be approved.
- Communication

  It is recommended that the operator define how approvals for dangerous goods requiring operator approval are communicated to the airport(s) of departure. It is recommended that operators consider a process where such approval is included in the passenger electronic record.
- Limitations

  The operator manuals should specify any limitations or procedural requirements that may apply to particular commodities (e.g. inspection at check-in by passenger service agents and/or security).
- Codeshare

  Where the operator has interline agreements with code share and/or alliance partners the operator should identify what the procedure is for obtaining the approval of the other airline(s) involved (e.g. by advising the passenger that they must obtain approval from the other operator).
- Awareness

  The operator should ensure that all staff who have an interaction with passengers, (i.e. reservations agents, passenger service agents, cabin crew and flight crew) are made aware of the process employed to ensure that the operator approval process remains effective.

Refer to DGR 2.3, which addresses dangerous goods permitted in passenger and crew checked and cabin baggage.

△ Refer to IGOM 1.1.6.4 for guidance that addresses the carriage of dangerous goods by passengers.

GRH 1.6.9

The Operator *should* ensure the processes and procedures contained in the OM for the conduct of ground handling operations are verified against the IATA Ground Operations Manual (IGOM) by completing the following:

(i) Perform and maintain an updated gap analysis of its own procedures against the IGOM to ensure a complete set of procedures exists for the applicable operations;

(ii) If variations are identified against the IGOM procedures, communicate them to applicable operational personnel of outsourced functions;

(iii) If variations are identified against IGOM "Safety Critical" procedures, such variations are risk assessed using the Operator's SMS and risk management method to ensure an alternative procedure is accepted by the Operator. **(GM)**

Auditor Actions

☐ **Identified/Assessed** implementation of an IGOM gap analysis (focus: completeness with IGOM procedures and update as per current IGOM).

☐ **Interviewed** responsible ground handling management representative(s).

☐ **Examined** selected procedures identified in the IGOM gap analysis (focus: ensure a complete set of procedures exists for the applicable operations).

☐ **Examined** selected OM procedures identified in the Gap analysis as variations ("safety relevant") from the IGOM (focus: assess completion of operator risk assessment).

☐ **Other Actions** (Specify)

Guidance

As a best practice, an operator should conduct a gap analysis of its OM processes and procedures to identify the level of equivalency with those in the IGOM. If variations are identified, they should be communicated to operational personnel of the provider that performs the outsourced function(s). If a variation from an IGOM "safety critical" procedure is identified, the operator should also conduct a risk assessment as per its own SMS risk assessment methodologies.

The IGOM "safety critical" procedures are identified in the IGOM with a specific symbol (refer to IGOM Introduction, Symbols, for a symbol description).

To conduct the specified gap analysis, the operator can access the online IGOM portal provided by IATA or use another equivalent method. A tutorial video that describes how to conduct such gap analysis can be found at https://youtu.be/LWpbmvby9m4.

1.7 Records System

GRH 1.7.1

The Operator shall have a system for the management and control of ground handling records to ensure the content and retention of such records is in accordance with requirements of the Authority, as applicable, and to ensure operational records are subjected to standardized processes for:

(i) Identification;

(ii) Legibility;

(iii) Maintenance;

(iv) Retrieval;

(v) Protection, integrity and security;

(vi) Disposal, deletion (electronic records) and archiving. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** management and control system for operational records in ground handling operations (focus: system includes standardized processes as specified in standard).
- ☐ **Interviewed** responsible management representative(s).
- ☐ **Examined** operational records in ground handling operations.
- ☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 2.6.1 located in ISM Section 1.

GRH 1.7.2

If the Operator uses an electronic system for the management and control of ground handling operations records, the Operator shall ensure the system provides for a scheduled generation of backup record files. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** management and control system for operational records in ground handling operations (focus: system defines schedule for periodic file backup).
- ☐ **Interviewed** responsible management representative(s).
- ☐ **Examined** record(s) of backup files for electronic records.
- ☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 2.6.2 located in ISM Section 1.

1.8 (Intentionally open)

1.9 Quality Assurance Program

GRH 1.9.1

The Operator shall have a quality assurance program that provides for the auditing and evaluation of the management system and operational functions within the scope of ground handling operations at planned intervals to ensure the Operator is:

(i) Complying with applicable regulations and standards;
(ii) Satisfying stated operational needs;
(iii) Identifying areas requiring improvement;
(iv) Identifying hazards to operations;
(v) Assessing the effectiveness of safety risk controls. **[SMS] (GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** role/organization/structure of quality assurance program in ground handling operations (focus: role/purpose within organization/SMS; definition of audit program scope/objectives; description of program elements/procedures for ongoing auditing of management/operational areas).
- ☐ **Interviewed** responsible quality assurance program manager.
- ☐ **Interviewed** selected operational managers (focus: interface with quality assurance program).
- ☐ **Examined** selected ground handling operations audit reports (focus: audit scope/process/organizational interface).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of Quality Assurance (QA).

Refer to Guidance associated with ORG 2.1.1 located in ISM Section 1 for typical audit program requirements.

Ideally, the specifications of this provision would also apply to external service providers that conduct outsourced operational functions.

A corporate quality assurance program that is applied to all operational areas of the company, including all functions within the scope of ground handling operations, satisfies this requirement.

△ Refer to the IATA Airport Handling Manual (AHM) 610 item 4.8.1 and 615, which contain guidance that addresses auditing of ground handling functions.

GRH 1.9.2

The Operator shall have a process for addressing findings resulting from audits conducted under the quality assurance program, which ensures:

(i) Identification of root cause(s);

(ii) Development of corrective action, as appropriate, to address finding(s);

(iii) Implementation of corrective action in appropriate areas of ground handling operations;

(iv) Evaluation of corrective action to determine effectiveness. **(GM)** ◄

Auditor Actions

☐ **Identified/Assessed** process for addressing audit findings within ground handling operations.

☐ **Interviewed** responsible quality assurance program manager.

☐ **Examined** selected audit reports/records (focus: identification of root cause, development/implementation of corrective action, follow-up to evaluate effectiveness).

☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 2.1.7 located in ISM Section 1.

GRH 1.9.3

The Operator shall have a process to ensure significant issues arising from ground handling operations quality assurance and risk management are subject to management review in accordance with ORG 4.1.1. **[SMS] (GM)** ◄

Auditor Actions

☐ **Identified/Assessed** process for management review of ground handling operations issues (focus: continual improvement of quality assurance program).

☐ **Interviewed** responsible quality assurance program manager.

☐ **Examined** selected records/documents of management review of ground handling operations quality assurance program issues (focus: specific issues/changes identified and implemented to improve quality assurance program).

☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 4.1.1 and 4.1.2 located in ISM Section 1.

GRH 1.9.4

The Operator shall have an audit planning process and sufficient resources to ensure audits of ground handling operations are:

(i) Scheduled at intervals to meet regulatory and management system requirements;

(ii) Conducted within the scheduled interval. **(GM)** ◄

Auditor Actions

☐ **Identified/Assessed** planning process for quality assurance auditing of ground handling operations (focus: audits planned/scheduled/conducted in accordance with applicable internal/external requirements).

- ☐ **Identified/Assessed** audit resources (focus: availability of sufficient auditors/other resources to accomplish audit plan).
- ☐ **Interviewed** quality assurance program manager.
- ☐ **Crosschecked** audit plan with selected audit reports, to verify adherence to plan (focus: audits conducted in accordance with audit plan).
- ☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 2.1.5 located in ISM Section 1.

1.10 Quality Control of Outsourced Operations and Products

GRH 1.10.1A

If the Operator has external service providers conduct outsourced ground handling operations functions, the Operator *should* ensure a service provider selection process is in place that ensures:

(i) Safety-relevant selection criteria are established;

(ii) Service providers are evaluated against these criteria prior to selection. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** selection process for external service providers.
- ☐ **Interviewed** responsible manager in ground handling operations.
- ☐ **Examined** selected records/documents that demonstrate application of the selection process.
- ☐ **Other Actions** (specify)

Guidance

The intent of this provision is for an operator to define relevant safety and security criteria for use in the evaluation and potential selection of ground handling operations service providers. This is the first step in the management of external service providers and would take place prior to the operator signing an agreement with a provider. The process need be applied only one time leading up to the selection of an individual service provider.

Refer to the guidance associated with ORG 1.6.1.

GRH 1.10.1B

If the Operator has external service providers conduct outsourced ground handling operational functions, the Operator shall have a process to ensure a contract or agreement is executed with such external service providers. Contracts or agreements shall identify the application of specific documented requirements that can be monitored by the Operator to ensure requirements that affect the safety and/or security of ground handling operations are being fulfilled by the service provider. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** processes for contract/agreement production/execution with external service providers of ground handling operational functions.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected ground handling operations outsourcing contracts/agreements (focus: inclusion of or reference to specific requirements applicable to external service providers).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Operational Function (Aircraft Operations) and Outsourcing.

The requirement for a contract or agreement applies to outsourced ground handling functions that affect the safety and security of operations, including routine aircraft servicing (e.g. potable water) and special functions such as aircraft fueling and de-/anti-icing.

If a ground handling function is expected to be accomplished in accordance with specific industry standards, the agreement would normally identify and specify the standards by exact name (e.g. aircraft fuel shall be delivered in accordance with the standards adopted by the IATA Fuel Quality Pool).

△ The AHM 810 contains detailed guidance as well as the standard ground handling agreement (SGHA) and a service level agreement. Additionally, IATA publishes a standard contract for the delivery of aircraft fuel.

Refer to Guidance associated with ORG 1.6.2 located in ISM Section 1.

GRH 1.10.2

If the Operator has external service providers conduct outsourced ground handling operational functions, the Operator shall have processes to monitor such external service providers to ensure ground handling safety and security requirements are being fulfilled. **(GM)** ◄

Note: *IOSA or ISAGO registration as the only means to monitor is acceptable provided the Operator obtains the latest of the applicable audit report(s) through official program channels and considers the content of such report(s).*

Auditor Actions

- ☐ **Identified/Assessed** processes used for monitoring external ground handling service providers (focus: monitoring process ensures provider fulfils applicable safety/security requirements).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected records/reports resulting from monitoring of ground handling operations service providers (focus: monitoring process ensures provider fulfils applicable safety/security requirements).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of ISAGO.

An external service provider that is on the ISAGO (IATA Safety Audit of Ground Operations) Registry for a particular station indicates such provider has been audited and is in conformity with ISAGO standards. The use of the ISAGO program is an acceptable method for certain elements of the monitoring processes. These elements must be within the scope of the ISAGO Standards Manual (GOSM).

Other inspection programs that might be considered for use as part of the monitoring of service providers include, as applicable, the IATA De-Icing/Anti-Icing Quality Control Pool (DAQCP), the IATA Fuel Quality Pool (IFQP) and the IATA Drinking-Water Quality Pool (IDQP).

☐ DAQCP and IFQP have an escalation mechanism for open findings but do not impose full conformity for the inspected provider.

☐ It is the responsibility of the operator that uses the inspection results, to determine actions regarding any open finding as per its safety management system.

☐ Operators need to monitor their network of service providers against the DAQCP/IFQP inspection plan and inspection results. Processes in place need to ensure that any open finding that could affect the safety of operations is accounted for and acted upon, as needed.

Refer to Guidance associated with ORG 2.2.1 located in ISM Section 1.

GRH 1.10.3

If the Operator has external service providers conduct outsourced ground handling operational functions, the Operator *should* ensure auditing is included as a process for the monitoring of external service providers in accordance with GRH 1.10.2. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** auditing processes used for monitoring external ground handling service providers.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.

- ☐ **Examined** selected reports of audits performed on external ground handling service providers (focus: audit process ensures provider is fulfilling applicable safety/security requirements).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of GOSARPs.

An acceptable method of auditing external service providers is the use of all, or part of the ISAGO Standards and Recommended Practices (GOSARPs) as applicable to the scope of the audit and the functions performed by the external service provider.

Participation in the ISAGO audit pool is an acceptable method for using the GOSARPs and associated checklists for the audit of external service providers in accordance with GRH 1.10.2.

Refer to the Introduction of the ISAGO Standards Manual (GOSM) for guidance that addresses use of the GOSARPs and associated checklists.

Refer to Guidance associated with ORG 2.2.2 located in ISM Section 1.

GRH 1.10.4

The Operator *should* have a process to ensure products purchased or otherwise acquired from an external vendor or supplier, which directly affect operational safety or security, meet the product technical requirements specified by the Operator prior to being used in the conduct of ground handling operations. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** acceptance processes for ensuring acquired products used in ground handling operations meet technical requirements.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected product acceptance records (focus: products meet ground handling operations technical requirements).
- ☐ **Other Actions** (Specify).

Guidance

Refer to Guidance associated with ORG 2.3.1 located in ISM Section 1.

1.11 Safety Management

Risk Management

GRH 1.11.1

The Operator shall have a hazard identification program for ground handling operations that includes a combination of reactive and proactive methods of hazard identification. **[SMS] (GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** safety hazard identification program in GRH operations (focus: program identifies hazards to aircraft operations; describes/defines method(s) of safety data collection/analysis).
- ☐ **Identified/Assessed** role of GRH operations in cross-discipline safety hazard identification program (focus: participation with other operational disciplines).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Interviewed** person(s) that perform GRH operations data collection/analysis to identify hazards to aircraft operations.
- ☐ **Examined** selected examples of hazards identified through GRH operations data collection/analysis.
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Hazard (Aircraft Operations) and Safety Risk.

Hazard identification is an element of the Safety Risk Management component of the SMS framework.

Refer to Guidance associated with ORG 3.1.1 located in ISM Section 1.

GRH 1.11.2

The Operator shall have a safety risk assessment and mitigation program for ground handling operations that specifies processes to ensure:

(i) Hazards are analyzed to determine the existing and potential safety risks to aircraft operations;

(ii) Safety risks are assessed to determine the requirement for risk control action(s);

(iii) When required, risk mitigation actions are developed and implemented in ground handling operations. **[SMS] [Eff] (GM)** ◄

Assessment Tool

Desired Outcome

• The Operator maintains an overview of its ground handling operations risks and through implementation of mitigation actions, as applicable, ensures risks are at an acceptable level.

Suitability Criteria (Suitable to the size, complexity and nature of operations)

• Number and type of analyzed hazards and corresponding risks.

• Means used for recording risks and mitigation (control) actions.

• Safety data used for the identification of hazards.

Effectiveness Criteria

(i) All relevant ground handling operations are analyzed for corresponding safety risks.

(ii) Safety risks are expressed in at least the following components:
- Likelihood of an occurrence.
- Severity of the consequence of an occurrence.
- Likelihood and severity have clear criteria assigned.

(iii) A matrix quantifies safety risk tolerability to ensure standardization and consistency in the risk assessment process, which is based on clear criteria.

(iv) Risk register(s) across the ground handling operations organization capture risk assessment information, risk mitigation (control) and monitoring actions.

(v) Risk mitigation (control) actions include timelines, allocation of responsibilities and risk control strategies (e.g. hazard elimination, risk avoidance, risk acceptance, risk mitigation).

(vi) Mitigation (control) actions are implemented to reduce the risk to a level of “as low as reasonably practical”.

(vii) Identified risks and mitigation actions are regularly reviewed for accuracy and relevance.

(viii) Effectiveness of risk mitigation (control) actions are monitored at least yearly.

(ix) Personnel performing risk assessments are appropriately trained in accordance with ORG 4.3.1.

Auditor Actions

☐ **Identified/Assessed** safety risk assessment and mitigation program in ground handling operations (focus: hazards analyzed to identify/define risk; risk assessed to determine appropriate action; action implemented/monitored to mitigate risk).

☐ **Identified/Assessed** role of ground handling operations in cross-discipline safety risk assessment/mitigation program (focus: participation with other operational disciplines).

☐ **Interviewed** responsible manager(s) in ground handling operations.

- ☐ **Interviewed** person(s) that perform ground handling operations risk assessment/mitigation.
- ☐ **Examined** selected records/documents that illustrate risk assessment/mitigation action.
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Ground Support Equipment (GSE), NOTOC (Notification to Captain), Risk Register, Safety Risk, Safety Risk Assessment (SRA), Safety Risk Management, Safety Risk Mitigation and Unit Load Device (ULD).

Risk assessment and mitigation is an element of the Safety Risk Management component of the SMS framework.

Hazards relevant to the conduct of ground operations are potentially associated with:

- Aircraft loading/unloading operations (e.g. unsafe airside driving, unsupervised ground operations activities at the airside, lack of PPE, ineffective baggage reconciliation process).
- Aircraft special loads (e.g. for dangerous goods, live animals, perishables, valuables, time/temperature-sensitive products: lack of or incomplete NOTOC, lack of or inadequate security controls).
- Aircraft servicing (e.g. for water/toilet service, catering: lack of guide man, lack of proper periodic water testing, lack of proper inspection before/after service).
- Passenger embarkation/disembarkation (e.g. Passengers walking on the ramp).
- Fueling operations (e.g. fueling with passengers on board the aircraft).
- De-/anti-Icing operations (e.g. lack of effective pre-departure checks, glycol/water mixture not effectively checked or tested, incorrect de-/anti-icing procedures).
- Aircraft towing and pushback (e.g. lack of wing walkers, improper connection/disconnection of tow-bars, improper ground-to-cockpit communication).
- Adverse weather conditions (e.g. low visibility, high wind, extreme temperatures, volcanic ash).
- ULD Management. (e.g. unsafe ULD loading/buildup/storage).
- Management of Ground Support Equipment (GSE) (e.g. lack of daily equipment checks, lack of proper identification of out-of-service GSE).
- Loading/securing of cargo on aircraft that transport cargo without passengers in the passenger cabin.

Refer to Guidance associated with ORG 3.2.1 located in ISM Section 1.

Operational Reporting

GRH 1.11.3

The Operator shall have an operational safety reporting system for ground handling operations that:

(i) Encourages and facilitates ground handling operations personnel to submit reports that identify safety hazards, expose safety deficiencies and raise safety concerns;

(ii) Requires reporting of events that result in aircraft ground damage;

(iii) Includes analysis and ground handling operations management action to address operational deficiencies, hazards, incidents and concerns identified through the reporting system. **[SMS] (GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** operational safety reporting system in ground handling operations (focus: system urges/facilitates reporting of hazards/safety concerns; includes analysis/action to validate/address reported hazards/safety concerns).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Interviewed** person(s) that perform operational safety report review/analysis/follow-up in ground handling operations.

- ☐ **Examined** data that confirm an effective ground handling operations safety reporting system (focus: quantity of reports submitted/hazards identified).
- ☐ **Examined** records of selected ground handling operations safety reports (focus: analysis/follow-up to identify and address reported hazards/safety concerns).
- ☐ **Other Actions** (Specify).

Guidance

Safety reporting is a key aspect of SMS hazard identification and risk management.

To enhance industry data usability, it is recommended that ground damage events are reported in accordance with a formal reporting structure.

Refer to ORG 2.4.3, which addresses the submission of safety and security occurrences to IATA for inclusion in the Incident Data Exchange (IDX).

△ Refer to IGOM 6.4 for guidance that addresses reporting of incidents, accidents and near-misses.

Refer to Guidance associated with ORG 3.1.2 located in ISM Section 1.

GRH 1.11.4

The Operator *should* have a confidential safety reporting system that encourages and facilitates the reporting of events, hazards and/or concerns resulting from or associated with human performance in ground handling operations. **(GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** confidential safety reporting system in ground handling operations (focus: system urges/facilitates reporting of events/hazards/safety concerns caused by humans; report/reporters are de-identified; includes analysis/action to validate/address reported hazards/safety concerns).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** records of selected ground handling operations confidential safety reports (focus: report/reporter de-identification; analysis/follow-up to identify/address reported hazards/safety concerns).
- ☐ **Other Actions** (Specify)

Guidance

Refer to Guidance associated with ORG 3.1.3 located in ISM Section 1.

Safety Performance Monitoring and Management

GRH 1.11.5

The Operator shall have processes for setting safety performance indicators (SPIs) and, as applicable, safety performance targets (SPTs) in ground handling operations as means to monitor the achievement of its safety objectives and to validate the effectiveness of risk controls.
[SMS] (GM) ◄

Auditor Actions

- ☐ **Identified/Assessed** program for setting SPIs and SPTs in ground handling operations (focus: program defines the development and implementation of SPIs that are aligned with safety objectives).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected (focus: SPIs and SPTs are being used to monitor operational performance toward effectiveness of risk controls and achievement of safety objectives).
- ☐ **Examined** records/documents that identify tracking of ground handling operations SPIs and SPTs (focus: tracking used to assess/monitor operational safety performance, assess/validate risk control effectiveness).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Safety Assurance, Safety Objective, Safety Performance Indicator (SPI) and Safety Performance Target (SPT).

Setting SPIs that are consistent with safety objectives is an element of the Safety Assurance component of the SMS framework.

SPIs are used by an operator to track and compare its operational performance against the achievement of its safety objectives and to focus attention on the performance of the organization in managing operational risks and maintaining compliance with relevant regulatory requirements.

SPIs are usually specifically identified occurrences, conditions or parameters used for monitoring and assessing safety performance, For example, SPIs in ground handling operations could be used to monitor and assess various types of aircraft ground damage.

SPTs define short-term and medium-term safety performance management desired achievements. They act as 'milestones' that provide confidence that the organization is on track to achieving its safety objectives and provide a measurable way of verifying the effectiveness of safety performance management activities. The setting of SPTs is normally accomplished after considering what is realistically achievable and, where historical trend data are available, the recent performance of the particular SPI.

It is not always necessary or appropriate to set or define SPTs as there could be some SPIs that are better monitored for trends rather than against a targeted number. Safety reporting is an example of when having a target could either discourage people not to report (if the target is not to exceed a number) or to report trivial matters to meet a target (if the target is to reach a certain number).

Refer to Guidance associated with ORG 1.4.1 (safety objectives) and ORG 1.4.2 (SPIs and SPTs) located in ISM Section 1.

2 Training and Qualification

2.1 Training Program

GRH 2.1.1

The Operator shall have a process to ensure personnel that perform operational duties in functions within the scope of ground handling operations for the Operator, to include personnel of external service providers, complete:

△

(i) Initial training prior to being assigned to perform such operational duties;

(ii) Recurrent training or recurrent assessment not less than once during every 36-month period, except for recurrent training in dangerous goods as specified in GRH 2.2.1 or as per requirements of the regulatory authority;

(iii) Re-qualification training applicable to personnel that become unqualified for any reason, prior to being reassigned to perform operational duties. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** training program for ground handling personnel (focus: ensures completion of initial/recurrent/requalification training for personnel in all ground handling functions; includes processes that ensure personnel of external service providers complete initial/recurrent training).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected initial/recurrent/requalification course curricula/syllabi (focus: curricula/syllabi include initial/recurrent/requalification training courses for all personnel that perform ground handling duties/functions).
- ☐ **Examined** initial/recurrent/requalification training records of selected personnel (focus: completion of initial/recurrent/requalification training).
- ☐ **Other Actions** (Specify).

Guidance

Refer to the Applicability box at the beginning of this section for the functions within the scope of ground handling operations.

△ Requirements for initial, recurrent training or recurrent assessment and re-qualification training apply to all personnel that perform duties within the scope of ground handling operations for the operator, both at the main base and at all other locations.

☐ In some instances, other than DGR, recurrent training or assessment period specified by local regulatory authorities might be longer than 36 months (e.g., aerodrome driving license). In such cases such period can be accepted in lieu of the 36 months.

☐ For additional guidance on definition of type of trainings refer to AHM 1110 Section 4 (Training terminology).

GRH 2.1.2

The Operator shall have a process to ensure the training programs completed by ground handling operations personnel in accordance with GRH 2.1.1 provide the knowledge necessary to perform duties, execute procedures and operate the equipment associated with specific ground handling functions and responsibilities. Such programs shall include:

(i) Familiarization training on applicable regulations;
(ii) In-depth training on requirements, including policies, procedures and operating practices;
(iii) Training in human factors principles;
(iv) Safety training on associated operational hazards. **(GM)**

Auditor Actions

☐ **Identified/Assessed** training programs for ground handling operations personnel (focus: includes programs for personnel in all ground handling operations functions).

☐ **Interviewed** responsible manager(s) in ground handling operations.

☐ **Examined** selected training program records/documents (focus: programs include all specified training areas as applicable to ground handling operations functions).

☐ **Other Actions** (Specify).

Guidance

Refer to the IRM for the definition of FOD (Foreign Object Debris/Damage) and Human Factors Principles.

Safety and human factors training typically includes the following subject areas as appropriate to the individual's assigned operational function(s):

- Safety philosophy;
- Safety regulations;
- Hazards;
- Human factors;
- Airside markings and signage;
- Emergency situations;
- FOD prevention;
- Personal protection;
- Accidents, incidents, near misses;
- Airside safety supervision.

AHM 1110 Item 11 contains detailed guidance for safety and human factors training.

GRH 2.1.3

The Operator shall have a process to ensure training for personnel that perform operational duties in functions within the scope of ground handling operations for the Operator:

(i) Includes testing or evaluation by written, oral or practical means, as applicable;

(ii) Requires a demonstration of adequate knowledge, competency and proficiency to perform duties, execute procedures and/or operate equipment. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** training programs for ground handling operations personnel (focus: programs include a process for testing/evaluations/demonstrations as specified).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected initial/recurrent/requalification course curricula/syllabi (focus: training courses include testing/evaluations/demonstrations).
- ☐ **Examined** initial/recurrent/requalification training records of selected personnel (focus: testing/evaluations/demonstrations as specified completed during initial/recurrent/requalification training).
- ☐ **Other Actions** (Specify).

Guidance

Training is usually divided into theoretical and practical parts, both of which normally include a record of an evaluation and successful completion of training.

An assessment of knowledge gained from the theoretical part of training is normally accomplished through use of written or computer-based testing.

Practical training typically includes an on-the-job training phase followed by a demonstration of competence in the skills that are relevant to the specific ground handling function.

An oral means of assessment may be included as an element of the evaluation included in the theoretical and/or practical parts of training but would typically not be used as the sole method of evaluation.

Records of evaluations for both theoretical and practical training are normally retained to verify currency in accordance with training program requirements.

GRH 2.1.4

The Operator shall have a process to ensure completion of required training by personnel that perform operational duties in functions within the scope of ground handling operations for the Operator is recorded and such records are retained in accordance with GRH 1.7.1.

Auditor Actions

- ☐ **Identified/Assessed** ground handling operations records system (focus: system includes training records of personnel that perform ground handling operations duties).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** initial/recurrent/requalification training records of selected personnel (focus: completion of initial/recurrent/requalification training).
- ☐ **Other Actions** (Specify).

GRH 2.1.5

The Operator shall have a process to ensure the training programs completed by ground handling operations personnel in accordance with GRH 2.1.1 are reviewed and updated to remain relevant and current.

Auditor Actions

- ☐ **Identified/Assessed** process for review and update of training programs completed by ground handling operations personnel.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.

- ☐ **Examined** selected training program records/documents (focus: programs have been periodically reviewed and updated).
- ☐ **Other Actions** (Specify).

2.2 Program Elements

△ **GRH 2.2.1**

The Operator shall have a process to ensure ground handling operations personnel complete dangerous goods training, to include initial training and recurrent training within 24 months of previous training in dangerous goods. Such training shall be completed by personnel that perform operational duties in the following functions within the scope of ground handling operations:

(i) Passenger handling;
(ii) Baggage handling;
(iii) Aircraft loading;
(iv) Load control. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** dangerous goods training program (focus: defines DG training requirements for ground handling personnel as appropriate for specific assigned responsibilities/duty functions).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** applicable initial/recurrent dangerous goods training curricula and syllabi (focus: subject areas appropriate for personnel based on specific responsibilities/duty functions).
- ☐ **Examined** training records of selected personnel (focus: completion of required training as appropriate for assigned responsibilities/duty functions).
- ☐ **Other Actions** (Specify)

Guidance

△ The training and assessment for dangerous goods training for aircraft loading and load control personnel will depend on whether the operator carries dangerous goods as cargo or not. However, dangerous goods training is required for all indicated operator ground handling personnel. The course content and assessment are determined by the operator and may vary depending on specific responsibilities and duty function(s).

△ Recurrent training in dangerous goods is completed within a validity period that expires 24 months from the previous training to ensure knowledge is current unless a shorter period is defined by a competent authority. However, when such recurrent training is completed within the final 3 months of the 24-month validity period, the new validity period may extend from the month on which the recurrent training was completed until 24 months from the expiry month of the current validity period. If such recurrent training is completed *prior* to the final three months of the validity period, the new validity period would extend 24 months from the month the recurrent training was completed.

△ Refer to DGR 1.5. Additional guidance material for competency-based training and assessment, that includes adapted task lists for well-defined job functions, is available at www.iata.org/dangerousgoods.

GRH 2.2.2 (Intentionally open)

△ **GRH 2.2.3**

The Operator shall have a process to ensure initial and recurrent training or recurrent assessment completed by applicable ground handling personnel in accordance with GRH 2.1.1 addresses the following areas of operations, as applicable to ground handling duties or function(s) performed:

(i) Passenger services;
(ii) Ramp services;
(iii) Load control;

(iv) Aircraft fueling;
(v) Aircraft ground de-/anti-icing.

Auditor Actions

- ☐ **Identified/Assessed** training program for ground handling personnel (focus: training program addresses all specified operational areas).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected initial/recurrent/requalification training curricula/syllabi (focus: training addresses all specified operational areas).
- ☐ **Examined** initial/recurrent/requalification training records of selected personnel (focus: completion of training appropriate for individual duties/functions performed).
- ☐ **Other Actions** (Specify)

GRH 2.2.4

The Operator *should* have processes to ensure training for ground handling personnel assigned to perform passenger services, ramp services and load control as specified in GRH 2.2.3 include training elements in accordance with specifications in **Table 6.1**. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** training program for ground handling personnel (focus: training addresses functions associated with passenger services, ramp services and load control).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected initial/recurrent/requalification training curricula/syllabi (focus: curricula/syllabi included training elements as specified in Table 6.1).
- ☐ **Examined** initial/recurrent/requalification training records of selected personnel (focus: completion of training appropriate for individual duties/functions performed).
- ☐ **Examined** selected training program matrices (focus: proper relationship between ground handling functions and training subjects specified in Table 6.1).
- ☐ **Other Actions** (Specify)

Guidance

△ For additional guidance refer to AHM 1110, Ground Operations Training Program.

GRH 2.2.5

The Operator *should* have a process to ensure training for ground handling personnel assigned to perform aircraft fueling as specified in GRH 2.2.3 includes the following training elements:

(i) Safe operation of equipment;
(ii) Emergency procedures;
(iii) Fuel spillage avoidance response;
(iv) Aircraft fueling and defueling procedures;
(v) Aircraft-specific training. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** training program for ground handling personnel (focus: program includes the specified training elements associated with aircraft fueling operations).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected initial/recurrent/requalification training curricula/syllabi (focus: curricula/syllabi address the specified training elements for aircraft fuelling).
- ☐ **Examined** selected initial/recurrent/requalification training records (focus: personnel have completed training appropriate to operational functions performed).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IATA Guidance Material on Standard Into-Plane Fuelling Procedures as applicable to functions directly involved in aircraft fuelling operations.

GRH 2.2.6

If the Operator conducts flights from any airport when conditions are conducive to ground aircraft icing, the Operator *should* have a process to ensure training for ground handling personnel assigned to perform aircraft ground de-/anti-icing as specified in GRH 2.2.3 includes following training elements:

(i) Common standard, regulation and recommendation including local rule and restriction;
(ii) Hazard of snow, ice and frost;
(iii) Safe operation of equipment and de/anti-icing operation including aircraft critical area;
(iv) Fluid characteristics and application, and limitation of holdover time;
(v) Deicing/anti-icing codes, communication and coordination. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** training program for ground handling personnel (focus: program includes the specified training elements associated with aircraft de-/anti-icing operations).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected initial/recurrent/requalification training curricula/syllabi (focus: curricula/syllabi address the specified training elements for aircraft de-/anti-icing).
- ☐ **Examined** initial/recurrent/requalification training records of selected personnel (focus: completion of training appropriate for individual duties/functions performed).
- ☐ **Other Actions** (Specify)

Guidance

Refer to ICAO Doc 9640-AN/940, which addresses training for personnel that conduct aircraft de-/anti-icing.

Refer to SAE AS 6286 for syllabus specifications for training of personnel that perform functions directly involved in aircraft de-/anti-icing.

2.3 SMS Training

GRH 2.3.1

The Operator shall have a program that ensures its ground handling operations personnel are trained and competent to perform SMS duties. The scope of such training shall be appropriate to each individual's involvement in the SMS. **[SMS] (GM)** ◄

Note: *The specifications of this provision are applicable to personnel of the Operator that perform functions within the scope of ground handling operations.*

Auditor Actions

- ☐ **Identified/Assessed** SMS training program for ground handling operations (focus: program ensures training for the operator's ground handling personnel as appropriate to individual SMS involvement).
- ☐ **Interviewed** responsible manager(s).
- ☐ **Examined** selected initial and recurrent ground handling operations training curricula (focus: training in individually relevant SMS duties/responsibilities).
- ☐ **Examined** selected operational ground handling personnel training records (focus: completion of SMS training).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of Operational Function (Aircraft Operations).

SMS training is an element of the Safety Promotion component of the SMS framework.

Refer to Guidance associated with ORG 4.3.1 located in ISM Section 1.

GRH 2.3.2

If the Operator outsources ground handling operational functions to external service providers, the Operator *should* have a program that ensures personnel of external service providers are trained and competent to perform SMS duties. The scope of such training *should* be appropriate to individual involvement in the Operator's SMS. **[SMS] (GM)** ◄

Auditor Actions

- ☐ **Identified/Assessed** SMS training program for ground handling operations (focus: program ensures training for ground handling personnel of external service providers as appropriate to individual SMS involvement).
- ☐ **Interviewed** SMS manager and/or designated management representative(s).
- ☐ **Examined** selected outsourcing contracts/agreements (focus: inclusion of requirement of SMS training for applicable service provider personnel).
- ☐ **Examined** selected records/reports resulting from monitoring of service providers (focus: monitoring process ensures applicable personnel of service providers have completed SMS training).
- ☐ **Other Actions** (Specify)

Guidance

SMS training is an element of the Safety Promotion component of the SMS framework.

Refer to Guidance associated with ORG 4.3.2 located in ISM Section 1.

3 Ground Handling Operations

3.1 Passenger and Baggage Handling

☐

GRH 3.1.1A

If the Operator conducts passenger flights, the Operator shall have a notification system that ensures information on the types of dangerous goods forbidden for transport on board an aircraft is displayed or presented to passengers as follows:

(i) At the airport:
  (a) Where tickets and/or boarding passes are issued;
  (b) Where passenger baggage is dropped off;
  (c) In aircraft boarding areas;
  (d) In baggage claim areas.

(ii) At any other location:
  (a) Where tickets and/or boarding passes are issued;
  (b) Where checked baggage is accepted.

Auditor Actions

- ☐ **Identified/Assessed** dangerous goods notification system (focus: system is comprehensive; addresses all aspects of passenger notification and all applicable areas).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** Airport applicable areas (focus: passengers receive specified dangerous goods information).
- ☐ **Observed** airport passenger/baggage handling operations (focus: passengers receive dangerous goods information as specified).
- ☐ **Other Actions** (Specify)

Guidance

Guidance may be found in DGR 1.4.3.

△ **GRH 3.1.1B**

If the Operator conducts passenger flights, the Operator shall have a notification system that ensures information on the types of dangerous goods forbidden for transport on board an aircraft is communicated to passengers where ticket purchase and/or boarding pass issuance can be completed without the involvement of another person. Such system shall ensure:

□ (i) The passenger is required to acknowledge that the requisite information has been presented;

(ii) The requisite information is provided to passengers:

(a) At the point of ticket purchase or, where that is not practical, prior to issuance of a boarding pass;

(b) At issuance of a boarding pass, or when no boarding pass is issued, prior to boarding the aircraft. **(GM)**

Auditor Actions

□ **Identified/Assessed** dangerous goods notification system (focus: system is comprehensive; addresses all aspects of passenger notification).

□ **Interviewed** responsible manager(s) in ground handling operations.

△ □ **Observed** online passenger ticketing and boarding pass issue system, self-check-in kiosks (focus: passengers receive specified dangerous goods information and are required the acknowledgement).

△ □ **Observed** airport passenger/baggage handling operations (focus: passengers that bought the ticket and/or boarded without the involvement of another person receive dangerous goods information at passenger handling locations).

□ **Other Actions** (Specify)

Guidance

The dangerous goods notification system may be documented in either the OM or in other appropriate and controlled manuals.

Use of the internet or self-ticketing kiosks are examples of methods of ticket purchase and/or boarding pass issuance that can be completed by the passenger without the involvement of another person. When such methods are used, dangerous goods information is normally presented in a manner that does not allow completion of the process until the passenger has acknowledged that the restrictions have been presented.

Dangerous goods information in pictorial form is a preferred method of presentation to passengers.

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Guidance may be found in DGR 1.4.3.

GRH 3.1.2

If the Operator conducts passenger flights, the Operator shall ensure a process is in place that requires, when dangerous goods not permitted for carriage on board the aircraft are discovered on the person of or in the baggage of a passenger, a report is made to the appropriate authority of the state of occurrence. **(GM)**

Note: *The specifications of this provision are applicable to operators that transport, and also to operators that do not transport, dangerous goods as cargo.*

Auditor Actions

□ **Identified/Assessed** a process to report discovery of prohibited dangerous goods on the person of or in the baggage of a passenger to the applicable authority.

□ **Interviewed** responsible manager(s) in ground handling operations.

- ☐ **Observed** passenger/baggage handling operations (focus: process for reporting cases of prohibited dangerous goods found in the possession of passengers).
- ☐ **Examined** selected reports of prohibited dangerous goods possessed by passenger (focus: reports submitted to appropriate authority in state of occurrence).
- ☐ **Other Actions** (Specify)

Guidance

Guidance may be found in DGR 2.3 and 9.6.2, and in IGOM 1.1.6.4.

GRH 3.1.3

If the Operator conducts passenger flights and accepts battery-operated mobility aids for transport on the aircraft, the Operator shall have procedures for acceptance and handling of such mobility aids to ensure they meet following requirements:

(i) The battery is a type that is permitted;

(ii) Battery terminals are protected and electrical circuits are isolated;

(iii) Loading is in a manner that prevents movement and damage from other cargo;

(iv) If applicable, batteries are removed, protected and transported as per specifications applicable to the type of batteries;

(v) The pilot in command is informed of the location of the mobility aids and/or the batteries. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for acceptance/handling of battery-operated mobility aids.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** acceptance/handling of battery-operated mobility (focus: acceptance/handling procedures are implemented).
- △ ☐ **Examined** selected retained documents (e.g. NOTOC or load sheet) of accepted battery-operated mobility aids (focus: mobility aids accepted/handled in accordance with procedures; notification to PIC includes location).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of Passenger Mobility Aid.

△ Refer to DGR 2.3.2 and 1.4.2.2 (f) for additional guidance.

GRH 3.1.4 (Intentionally open)

△ **GRH 3.1.5**

The Operator shall have a policy and procedures for the preflight acceptance or non-acceptance, as well as handling, of passengers who might require special handling by ground passenger handling personnel. Such policy and procedures shall be in accordance with applicable regulations and, as a minimum, address:

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(i) Passengers with disabilities or reduced mobility;

(ii) Passengers with injuries or illness;

☐ (iii) Persons on stretchers;

△ (iv) Infants and children, including unaccompanied children (UMNR) if accepted;

△ (v) Inadmissible passengers, deportees or persons in custody. **(GM)**

Auditor Actions

△
- ☐ **Identified/Assessed** policy and procedures as specified in the standard for the acceptance and handling of passengers requiring special attention by the ground passenger handling personnel.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Sampled** records of specific cases of handling special needs passengers.
- ☐ **Observed** passenger/baggage handling operations (focus: policy/procedures for preflight acceptance of passengers that require special handling).
- ☐ **Other Actions** (Specify)

Guidance

A policy and associated procedures typically address the acceptance and pre-boarding handling of passengers that require special handling, or perhaps the refusal to accept certain categories of passengers. For example, such policy and procedures might include or address the following:

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- For passengers with disabilities: Acceptance and/or limitations for such acceptance in accordance with applicable regulations, ground handling and, as applicable, specialized equipment considerations.
- If unaccompanied children are accepted: Maximum number, minimum age, any special arrangements once on board, specific seat allocation, ground handling considerations.
- If stretchers are accepted: Maximum number, escort requirement, associated equipment that would need to be available, ground handling considerations.

△
- If deportees or passengers in custody are accepted: Maximum number, number of escort officers, specific seat allocation, ground handling considerations.

Refer to IGOM 1.4.

GRH 3.1.6

If the Operator conducts passenger flights, the Operator shall have a policy and associated procedures for addressing passengers that exhibit unruly behavior and/or interfere prior to flight departure. Such policy and procedures shall be in accordance with local laws and regulations and specify measures that will ensure the safety of the aircraft, persons on board and their property. As a minimum, the policy and procedures shall address:

(i) Identification of passenger unruly behavior and interference;

☐ (ii) Identification of passengers showing signs of intoxication, whether through alcohol or other substances, which might contribute to unruly behavior and interference;

(iii) Conditions under which passengers may be denied boarding in accordance with the applicable authority;

△ (iv) Reporting of instances of passenger unruly behavior. **(GM)**

Auditor Actions

△
- ☐ **Identified/Assessed** policy and procedures for identifying and addressing passengers that show signs of intoxication, exhibit unruly behavior and/or interfere prior to flight departure.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Sampled** records of specific cases of passenger unruly behavior/interference.

△
- ☐ **Observed** passenger/baggage handling operations (focus: policy/procedures for preflight handling of passenger with sign of intoxication, unruly behavior/interference).
- ☐ **Other Actions** (Specify)

Guidance

A policy and associated procedures would typically be published to ensure awareness by all applicable ground personnel.

To ensure procedures are effective, guidelines are typically created to address all aspects of managing unruly behavior including prevention.

△ The intent of item (iv) is that instances of passenger unruly behavior or interference are reported internally in accordance with SEC 1.12.1 and SEC 4.3.1. Such reporting is usually done for the purpose of performing trend analysis and developing appropriate mitigation measures. In addition, depending on the severity, some instances may be required to be reported to the applicable aviation security authority in accordance with SEC 4.3.2.

Refer to IGOM 1.4.10 for guidance that addresses unruly passengers.

3.2 Airside Operations

GRH 3.2.1

The Operator shall have processes that ensure an assignment of responsibility for the supervision of all of its airside operational activities. Such processes shall ensure.

(i) Aircraft ground movement, aircraft handling and loading/unloading operations supervision is performed in accordance with OM and applicable regulations.

(ii) At each location where aircraft turnaround handling operations are conducted, an aircraft turnaround plan that includes related turnaround coordination is established and, as applicable, supervision functions are assigned to responsible person(s). **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** processes that ensure responsibility for supervision is assigned for conduct of airside operational activities.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** passenger/baggage handling operations (focus: supervisors are assigned to all passenger/baggage handling operational activities).
- ☐ **Observed** aircraft loading operations (focus: supervisors are assigned to all aircraft loading operational activities).
- ☐ **Observed** aircraft ground handling operations (focus: supervisors are assigned to all aircraft ground handling operational activities).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Aircraft Turnaround Coordinator and Aircraft Turnaround Plan.

Supervision of airside operations covers all aircraft ground handling activities and focuses on appropriate general safety rules for aircraft turnaround (e.g. driving in the vicinity of the aircraft, walking around and approaching the aircraft).

At stations where aircraft turnaround operations are conducted, supervision functions, roles and responsibilities are established in advance to ensure an adequate level of operational safety and security is achieved during an aircraft turnaround. The aircraft turnaround plan would ensure there is appropriate coordination among the entities (e.g. operator, ground service providers) involved in an aircraft turnaround.

Refer to IGOM 6 for guidance that addresses aircraft turnaround handling and related supervision functions.

Refer to IGOM 6.3 for guidance that addresses aircraft turnaround coordination/supervision requirements.

GRH 3.2.2

The Operator shall ensure aircraft arrival procedures are in place that are completed prior to aircraft arrival at the assigned parking gate or stand. Such procedures shall ensure:

(i) The ramp area surface is inspected and is free of:

(a) Debris that could cause foreign object damage (FOD);

(b) Contamination that could be hazardous to aircraft movement.

(ii) The aircraft movement path is clear of objects and obstacles;

(iii) Personnel not involved in the aircraft arrival are positioned outside the equipment restraint area (ERA);

(iv) Required GSE is available and positioned clear of the ERA;

(v) The aircraft docking guidance system is operational or, if applicable, marshalling personnel are in place;

(vi) If applicable, wing walkers and/or other applicable personnel are present. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** aircraft arrival procedures in the OM (focus: published procedures for aircraft arrival are in accordance with specifications in this standard).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** aircraft arrival operations (focus: procedures for aircraft arrival are implemented as published in the OM).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of Equipment Restraint Area (ERA) and Foreign Object Debris/Damage (FOD).

As specified in item (i) (b), snow and ice are ramp surface contaminants that can be hazardous to aircraft ground movement.

Documented procedures in accordance with IGOM 4.1.1, 4.1.2.1 and 4.1.3.1 will typically demonstrate documental conformity with the specifications in this provision.

GRH 3.2.3

The Operator shall ensure aircraft arrival procedures are in place that are completed once an aircraft has stopped at the parking gate or stand. Such procedures shall ensure:

(i) Vehicles and personnel remain clear of parking stand until engines are shut down and anti-collision lights are turned off;

(ii) As applicable, wheel chocks are positioned at the landing gear wheels and verbally/visually confirmed to the flight crew;

(iii) Safety cones are placed around the aircraft;

(iv) An aircraft exterior inspection is accomplished prior to GSE being positioned to the aircraft to identify and record visible aircraft damage. **(GM)**

Note: *Procedures shall ensure visible damage found during the aircraft exterior inspection is reported to a supervisor and the flight crew, and GSE is not positioned to the aircraft in an area where such damage exists.*

Auditor Actions

- ☐ **Identified/Assessed** aircraft arrival procedures in the OM (focus: published procedures for aircraft arrival inspection is in accordance with specifications in this standard).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** aircraft arrival operations (focus: procedures for aircraft arrival are implemented as published in the OM).
- ☐ **Other Actions** (Specify)

Guidance

Refer to IGOM 3.1.2 for guidance that addresses general ramp safety.

During the aircraft exterior inspection, involved ground handling personnel confirm there is no damage to the aircraft where GSE will be positioned before such GSE is moved toward the aircraft. In addition, an assigned person completes a walkaround inspection to identify any damage to other areas of the aircraft.

Communication with the flight crew is normally established through use of the aircraft intercom system. However, when necessary, such communication may be conducted using standardized hand signals.

Documented procedures in accordance with IGOM 4.1 (Aircraft Arrival), IGOM 4.2 (Aircraft Chocking) and IGOM 4.3 (Aircraft Coning) will typically demonstrate documental conformity with the specifications in this provision.

Refer also to ICAO Manual on Ground Handling 6.3.3.3 and 6.3.5.3.

GRH 3.2.4 (Intentionally open)

△ **GRH 3.2.5**

The Operator shall have procedures for the opening and closing of aircraft cabin access doors during normal operations. Such procedures should specify:

(i) Who is responsible for opening and closing aircraft cabin access doors;

(ii) When doors should be opened and closed;

(iii) Appropriate methods of communication and/or coordination between flight crew, cabin crew and ground staff to maintain safety during normal door operations. **(GM)**

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Auditor Actions

- ☐ **Identified/Assessed** procedures for opening and closing of aircraft cabin access doors.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** aircraft ground handling operations (focus: cabin door opening/closing procedures).
- △ ☐ **Coordinated** with flight and FLT and CAB auditors (focus: complementary CAB 3.2.4A and FLT 3.13.11 procedures for opening and closing of aircraft cabin access doors).
- ☐ **Other Actions** (Specify)

Guidance

Typically, operators have procedures for opening and closing cabin access doors both from the outside and the inside. Responsibilities for opening and closing of cabin access doors can vary by operator, by aircraft type and/or by phase of operation (for example, an operator may have different requirements for a live flight with the flight and cabin crew on board versus a towing operation without any crew on board).

Conformity with this provision is assessed in conjunction with CAB 3.2.4A and, if applicable, FLT 3.13.11.

Refer to IGOM 4.4.2 for additional guidance on Cabin access doors operations.

GRH 3.2.6A

The Operator shall ensure procedures for the opening and closing of aircraft cabin access doors require that GSE or a passenger boarding bridge:

(i) Is positioned at a cabin access door;

(ii) Remains positioned at a cabin access door when such door is open unless an appropriate fall prevention device is placed across the open door;

(iii) Is removed from a cabin access door immediately after such door is closed. **(GM)**

Note: *The specifications of this provision do not apply to cabin access doors that have integral airstairs when such doors are open and the integral airstairs are deployed.*

Auditor Actions

- ☐ **Identified/Assessed** procedures for GSE positioning at aircraft cabin access doors.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** aircraft ground handling operations (focus: door opening/closing procedures that require GSE positioned outside open cabin access door).
- ☐ **Other Actions** (Specify)

Guidance

Some aircraft types with certain galley configurations require the cabin door to be opened in order to service the trash bins. For these aircraft, it is allowable to partially open the cabin door (i.e. “crack” the door) in order to provide sufficient space to allow the servicing of the trash bin. However, the cabin door is not fully swung open. Once the trash bin service is completed, the cabin door would then be immediately closed and secured.

Sometimes, for ventilation purposes, aircraft cabin access doors may be left open when there are no persons on board. In such cases the stairs or boarding bridge is usually removed to prevent unauthorized access to the aircraft.

Refer to SEC 3.1.2, which specifies measures that must be in place to prevent unauthorized access to the aircraft.

GSE or a passenger boarding bridge would normally not be removed from a position at an aircraft cabin access door until either:

- The door has been closed and secured by an authorized person, or
- An appropriate fall prevention device has been placed across an open door.

If an aircraft cabin access door is fitted with integral airstairs, and such airstairs are deployed and in use, then this provision is not applicable. However, if a cabin access door is equipped with retractable integral airstairs (e.g. B737), and such airstairs remain retracted when the door is open, then this provision is applicable.

An appropriate fall prevention device consists of equipment or material, or a combination of both, that is designed to arrest or prevent the fall of a person from an open door. Examples include an industrial safety net, catch platform or safety harness system (other than a travel restraint system). The door strap installed in most aircraft cabin doors is not considered an appropriate fall prevention device.

Also, for some small aircraft the door sill is very low and positioning of GSEs at service cabin door is not possible. In that case, for the service cabin doors requirements as in GRH 3.2.6A do not apply.

Refer to IGOM 4.4.2 for guidance that addresses operation of cabin access doors.

GRH 3.2.6B

The Operator shall have procedures for the opening and closing of aircraft cargo hold access doors and, if GSE is required to reach cargo hold doors, such procedures shall also ensure:

△

(i) Maintenance stairs, belt loaders or other GSE used to reach cargo hold doors have safety rails to prevent falls;

(ii) Safety rails are raised or extended, as applicable, while personnel are accessing, opening and closing the doors. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for opening/closing of aircraft cargo hold doors.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** aircraft ground handling operations (focus: use of cargo hold door access/opening/closing procedures, to include operation of safety rails).
- ☐ **Other Actions** (Specify)

Guidance

Some aircraft types require GSE to be positioned in order to open and close cargo hold doors. Typically, rails are in the stowed position while the GSE is approaching and leaving the aircraft, and are raised or extended during door opening and closing to prevent falling from height.

Refer to guidance in IGOM 4.4.3 that addresses operation of cargo hold doors.

GRH 3.2.7

The Operator shall ensure aircraft departure procedures are in place and are completed prior to an aircraft departing the parking gate or stand. Such procedures shall ensure:

(i) The ramp area surface is inspected and is free of:
  (a) Debris that could cause foreign object damage (FOD);
  (b) Contamination that could be hazardous to aircraft movement;
  (c) Objects that could be impacted by the aircraft or subjected to jet blast effect.

(ii) Personnel not involved in the aircraft departure are positioned outside the ERA;

(iii) If applicable, wing walkers and/or other applicable personnel are present;

(iv) If applicable, communication with the flight crew on air starter unit (ASU) positioning, engine start sequence and identification of minimum specifications for volume and pressure of air supply;

(v) Use of anti-collision light(s);

(vi) Communication is established with the flight crew;

(vii) Vehicles and personnel remain clear of aircraft engine intake and/or blast areas during engine start. **(GM)**

Auditor Actions

☐ **Identified/Assessed** aircraft departure procedures in the OM (focus: published procedures for aircraft departure are in accordance with specifications in this standard).

☐ **Interviewed** responsible manager(s) in ground handling operations.

☐ **Observed** aircraft departure operations (focus: procedures for aircraft departure are implemented as published in the OM).

☐ **Other Actions** (Specify)

Guidance

Communication with the flight crew is normally established through use of the aircraft intercom system. However, when necessary, such communication may be conducted using standardized hand signals.

Documented procedures in accordance with IGOM 4.6 (Aircraft Departure) will typically demonstrate documental conformity with the specifications in this provision. Refer to:

- IGOM 4.6.7.1 for guidance that addresses safety precautions related to proper use of aircraft anti-collision lights;
- IGOM 4.6.8 for departure ground staff to flight deck communication and use of common phraseology;
- △ IGOM 4.6.3.2 and 4.6.3.3 for pre-departure communication;
- Refer to IGOM 3.1.2 for guidance that addresses general ramp safety.

Additional guidance may be found in ICAO Doc 10121, Manual on Ground Handling, Chapter 6, 6.3.9 and 6.3.10.3.

GRH 3.2.8

The Operator shall ensure an aircraft departure procedure is in place for an aircraft walkaround inspection that is completed immediately prior to the aircraft departing the parking gate or stand. Such check shall ensure:

(i) The ramp area surface is free of debris that could cause foreign object damage (FOD);

(ii) GSE and passenger boarding equipment are detached from the aircraft;

(iii) GSE and vehicles are positioned clear of the aircraft movement path;

(iv) The aircraft movement path is clear of objects and obstacles;

(v) Aircraft servicing panels and/or hatches are closed and secured (except external power and headset panels);

(vi) Aircraft cabin and cargo doors are closed and handles are flush with the fuselage;

(vii) Any visible aircraft damage or abnormalities are reported to the flight crew and maintenance;

(viii) Landing gear safety pins are removed. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** aircraft departure procedures in the OM (focus: published procedure for aircraft pre-departure check is in accordance with specifications in this standard).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** aircraft departure operations (focus: procedure for aircraft departure walkaround check is implemented as published in the OM).
- ☐ **Other Actions** (Specify)

Guidance

☐ Refer to the IRM for the definitions Landing gear safety pins.

Examples of aircraft abnormalities as specified in item (vii) are fuel and hydraulic fluid leakage.

The intent of item (viii) is that, during the aircraft walkaround inspection, a check is made to ensure none of the landing gear safety pins are installed. If it is found that one or more safety pins is/are installed, removal will normally be accomplished only by appropriately qualified personnel.

Documented procedures in accordance with IGOM 4.6.3.1 (Pre-Departure Walk Around Check) will typically demonstrate documental conformity with the specifications in this provision.

GRH 3.2.9

If the Operator conducts aircraft pushback or towing operations, the Operator shall ensure procedures are in place for such operations. Such procedures shall ensure:

(i) Equipment used is suitable for the aircraft type;

(ii) Maximum aircraft nose gear turn limits are not exceeded;

(iii) Standardized communication is used between the ground crew and the flight crew;

(iv) A safe connection, operation and disconnection of the pushback or towing equipment. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** aircraft departure procedures in the OM (focus: published procedure for aircraft pre-departure check is in accordance with specifications in this standard).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** aircraft departure operations (focus: procedure for aircraft departure walkaround check is implemented as published in the OM).
- ☐ **Other Actions** (Specify)

Guidance

Communication between the ground crew and flight crew as specified in item (iii) may be accomplished verbally using the aircraft interphone system or visually using hand signals.

Documented procedures in accordance with IGOM 4.6 (Aircraft Departure), IGOM 4.7 (Power Push Unit) and IGOM 4.9 (Aircraft Towing) will typically demonstrate documental conformity with the specifications in this provision.

GRH 3.2.10

The Operator *should* ensure procedures are in place for operations in adverse weather conditions, to include, as a minimum:

(i) Wintery or slippery apron conditions;

(ii) Thunderstorm, lightning;

(iii) High wind conditions;

(iv) Any other adverse weather or atmospheric conditions typical of the Operator's area(s) of operations. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** adverse weather condition procedures in the OM (focus: published procedure for airside precautions taken during adverse weather).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** aircraft departure operations (focus: procedure for airside operations during adverse weather is implemented as published in the OM).
- ☐ **Other Actions** (Specify)

Guidance

Winter weather operations might create additional hazards to airside operations such as slippery or icy apron surfaces.

Other adverse weather or atmospheric conditions could include extreme heat, volcanic ash or sandstorm.

Documented procedures in accordance with IGOM 3.3 (Adverse Weather Conditions), will typically demonstrate documental conformity with the specifications in this provision.

3.3 Load Control

GRH 3.3.1

The Operator shall ensure a Load Control system is in place that provides for:

(i) Aircraft weight and balance conditions that are correct and within limits;

(ii) Aircraft loaded in accordance with applicable regulations and specific loading instructions for the flight;

(iii) Dissemination of dangerous goods and other special load information applicable to each flight;

(iv) Information, to include last minute changes, that is in agreement with the actual load on the aircraft and presented on a final load sheet. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** Load Control system.
- ☐ **Interviewed** responsible manager(s) in load control operations.
- ☐ **Examined** checklists/procedures used in the load control process.
- ☐ **Observed** load control operations (focus: load control system includes functions necessary to address aircraft load, weight/balance calculation, production of final load sheet).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Load, Load Control, Special Load and Weight and Balance Manual (W&BM).

A load planning system typically entails, as a minimum:

- Assemblage of all data relating to the aircraft load (originating and en route stations);
- Planning of the load for ready accessibility;

- Planning of special loads according to restrictions, maximum quantities, separation and segregation requirements;
- Consideration of center of gravity parameters, including those affecting aircraft fuel consumption.

Guidance may be found in AHM 551 and 590.

GRH 3.3.2

The Operator shall have a process to ensure aircraft weight and balance data:

(i) Take into account limitations of the manufacturer and Operator;

(ii) Are current and accurate. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** load control process(es) for weight/balance calculations.
- ☐ **Interviewed** responsible manager(s) in load control operations.
- ☐ **Examined** examples of data used in the weight/balance calculation process.
- ☐ **Observed** load control operations (focus: weight/balance calculations based on current data, account for relevant limitations and specifics of aircraft type and actual configuration).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Cargo Restraint System, Combi (Combined Passenger and Cargo) Aircraft Operations and Supplemental Type Certificate (STC) Holder as well as the abbreviations DCS (Departure Control System), DOI (Dry Operating Index) and DOW (Dry Operating Weight).

Also refer to the IRM for the definition of Fuel (Flight Planning), which includes a definition of the term Unusable Fuel.

The generation of the balance chart (operational limits) is normally accomplished in accordance with methods defined by the manufacturer's Weight and Balance Manual or equivalent document, which, as applicable, is approved by the applicable authority. Such activity is usually performed by Flight Operations or Ground Operations, or a combination thereof.

The process for producing weight and balance data and related documentation typically ensures that weight and balance limits are respected both in normal and in special conditions.

The following are some examples of special conditions:

- Operations with fuel pumps inoperative (MEL);
- Fuel carried as ballast (unusable fuel transported for weight and balance purposes);
- Flight conducted with nonstandard aircraft configuration, nonstandard passenger weights or other nonstandard conditions (e.g. rows of seats removed to fit a stretcher);
- Flight operations with one or more cabin doors inoperative that results in passenger distribution curtailment (MEL).

To ensure aircraft weight and balance data are current and accurate, an operator typically performs periodic aircraft weighing as recommended by the aircraft manufacturer and approved by the applicable authority.

Additionally, an operator would continuously monitor any aircraft weight and balance variations that result from individual aircraft maintenance activities or modifications (usually accomplished in accordance with operational bulletins or other similar directives) that change the basic weight and balance reference data as per tolerances and procedures established and accepted by local authorities (normally identified as DOW/DOI).

This above monitoring activity is usually performed by flight operations or maintenance operations, or a combination thereof.

Weight and balance data is typically maintained and updated via the DCS, to include remote central load control (CLC) or any other available means, and then communicated in a timely manner.

For combi aircraft operations, guidance in the OM would typically address limitations of the actual combi aircraft main deck/cabin configuration and ensure load control processes maintain current aircraft weight and balance data and account for passengers being seated on the same deck and forward of the cargo. Such passengers would be protected through provision of an adequate buffer and/or cargo restraint system in accordance with requirements of the aircraft manufacturer, Supplemental Type Certificate (STC) holder and/or data approved by the Authority.

Guidance may be found in AHM 565 (EDP system semi-permanent data exchange) and AHM 562.

GRH 3.3.3

If the Operator conducts passenger flights, the Operator *should* ensure procedures are in place within the Load Control system to identify and address passenger loads that do not comply with conventional aircraft loading weight allowances. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** load control procedure(s) to identify/address passenger loads that do not comply with conventional aircraft loading weight allowances (focus: procedure(s) define/address conventional and non-conventional loading weight allowances).
- ☐ **Interviewed** responsible manager(s) in load control operations.
- ☐ **Examined** records that confirm application of other than normal/conventional weight allowances.
- ☐ **Observed** load control operations (focus: load control system includes procedures to identify/addresses passenger loads outside conventional aircraft load allowances).
- ☐ **Other Actions** (Specify)

Guidance

Certain passenger groups may fall outside weight allowances (e.g. sports teams, children) normally applied for weight and balance calculation. Adequate procedures within the system would identify and account for such load situations to ensure accuracy in aircraft load calculations.

Refer to IGOM 1.4.3.3 for guidance that addresses non-standard passenger loads. Additional guidance may be found in AHM 531.

GRH 3.3.4

If the Operator transports dangerous goods as cargo, the Operator shall ensure a process is in place to provide the pilot-in-command (PIC), as soon as practicable prior to departure of the aircraft, with accurate and legible written information pertaining to dangerous goods on board the aircraft to be transported as cargo. Such notification shall include the following:

(i) If applicable, Air Waybill number;

(ii) Proper shipping name and/or UN/ID number;

△ (iii) Class or division, and subsidiary hazard(s) corresponding to the label(s) applied, and for Class 1, the compatibility group;

(iv) If applicable, packing group;

(v) For non-radioactive material, number of packages, exact loading location and, as required, net quantity or, if applicable, gross weight of each package, except:

  (a) For UN 1845: carbon dioxide, solid (dry ice), UN number, proper shipping name, classification, total quantity in each aircraft hold and offload airport;

  (b) For UN 3480 (Lithium-ion batteries) and UN 3090 (lithium-metal batteries), only the UN number, proper shipping name, class, total quantity at each loading location, and whether the package must be carried on a cargo only aircraft need be provided. UN 3480 (Lithium-ion batteries) and UN 3090 (lithium-metal batteries) carried under a State exemption must meet all of the requirements of iv) and v).

(vi) For radioactive material, number and category of packages, overpacks or freight containers, exact loading location and, as applicable, transport index for each package;

(vii) Any restriction for transport on cargo aircraft only;

(viii) Offload airport;

(ix) If applicable, dangerous goods transported under a state exemption;

(x) An indication that aircraft loading personnel observed no evidence of damage to or leakage from packages, or leakage from ULDs, loaded onto the aircraft. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** load control process to provide PIC with information pertaining to onboard dangerous goods as cargo.
- ☐ **Interviewed** responsible manager(s) in load control operations.
- ☐ **Examined** documents (e.g. NOTOC) that confirm dangerous goods information was provided to PIC (focus: use of checklist/form that conforms to the specifications stated in the provision).
- ☐ **Observed** load control operations (focus: load control system includes process/method for providing applicable dangerous goods information to PIC).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of NOTOC (Notification to Captain) and State.

Information pertaining to dangerous goods on board the aircraft is typically presented to the PIC in a notification called the NOTOC (notification to the captain). The NOTOC contains the detailed information (as specified in this provision) relative to all dangerous goods loaded on the aircraft as cargo.

Information contained in the NOTOC may also be used:

- For emergency response to an accident or incident involving dangerous goods on board;
- To provide to air traffic services in the event of an in-flight emergency.

In the event the NOTOC is of such a size as to make in-flight radiotelephony transmission impracticable in an emergency situation, a summary of the information is typically provided to the PIC (NOTOC Summary), which contains at least the quantities and classes or division of dangerous goods in each cargo compartment.

Guidance may be found in DGR 9.5 and Table 9.5.A.

GRH 3.3.5

The Operator shall ensure weight and balance records are retained for a period in accordance with requirements of the regulatory authority, but no less than three months.

Auditor Actions

- ☐ **Identified/Assessed** means of retention for weight/balance records.
- ☐ **Interviewed** responsible manager(s) in load control operations.
- ☐ **Examined** selected weight and balance records.
- ☐ **Other Actions** (Specify)

GRH 3.3.6

If the Operator conducts passenger flights, the Operator *should* ensure procedures are in place for identification and communication to Load Control of:

(i) Hold baggage, individual or cumulative weights, that exceed normal allowances;

(ii) Gate delivery items, including individual or cumulative weights that exceed normal allowances;

(iii) Other non-normal items that must be considered in the load control process. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for ensuring identification/communication to Load Control of non-normal items that must be considered in the load control process (focus: procedures correctly define and address normal allowances and non-normal items).
- ☐ **Interviewed** responsible manager(s) in load control operations.

- ☐ **Examined** documents that confirm non-normal items were addressed in the load control process.
- ☐ **Observed** load control operations (focus: load control system includes procedures that ensure Identification/communication of load items that exceed normal weight allowances).
- ☐ **Other Actions** (Specify)

Guidance

Examples of other non-normal items as specified in item iii) might include musical instruments, medical equipment, sports equipment and service animals.

Refer to IGOM 1.1, 1.4, 2.1, 2.2 and 2.8 for further guidance that addresses non-normal loads.

GRH 3.3.7

If the Operator transports dangerous goods as cargo, the Operator shall have a process to ensure the legible copy of the dangerous goods information provided to the PIC in accordance with GRH 3.3.4:

(i) Is retained on the ground for a minimum period of three months after the flight on which the dangerous goods were transported;

☐ (ii) Includes an indication from the person responsible for loading the aircraft, that there was no evidence of any damage to or leakage from the packages or any leakage from the unit load devices loaded on the aircraft;

(iii) Includes an indication that the PIC has received the information. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** load control process that ensures dangerous goods information provided to PIC is retained and includes indication PIC has received the information.
- ☐ **Interviewed** responsible manager(s) in load control operations.
- ☐ **Examined** selected retained documents containing dangerous goods information that was provided to the PIC (e.g. NOTOC).
- ☐ **Other Actions** (Specify)

Guidance

The intent of item (i) is that either the NOTOC or a document containing all information that must be included in the NOTOC is retained for reference for a minimum period of three months or longer as required by the State of Flight Departure.

☐ An indication from the person responsible for loading is typically the person's signature.

An indication of receipt by the PIC is typically the PIC's signature.

Refer to IGOM 5.4.1.4 for guidance that addresses the notification to the PIC of onboard dangerous goods. Additional guidance may be found in DGR 9.5.

GRH 3.3.8

If the Operator transports dangerous goods as cargo, the Operator shall have a process to ensure the dangerous goods information provided to the PIC in accordance with GRH 3.3.4 is also made readily available to FOO, FOA or other specifically identified operational control personnel until the aircraft transporting the dangerous goods has arrived at the destination airport. Operational control personnel that are provided with such information shall be specifically identified by job title or function. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** load control process to ensure dangerous goods information provided to the PIC is made available to applicable operational control personnel.
- ☐ **Identified/Assessed** job titles and/or functions of responsible personnel.
- ☐ **Interviewed** responsible manager(s) in load control operations.

- ☐ **Examined** selected records of dangerous goods information provided to applicable operational control personnel.
- ☐ **Observed** load control operations (focus: load control system includes process for providing applicable dangerous goods information to operational control personnel).
- ☐ **Other Actions** (Specify)

Guidance

As specified in DSP 3.7.3, designated operational control personnel provide information about onboard dangerous goods as a way to assist emergency services that respond to an accident or serious incident involving the operator's aircraft. The intent of this provision is to ensure operational control personnel have ready access to such information so it can be reported without delay in the event an accident or serious incident should occur.

Operational control personnel that must have access to such dangerous goods information are typically identified in the appropriate manual by job position or function.

Refer to DSP 3.7.3 located in ISM Section 3.

3.4 Aircraft Loading

GRH 3.4.1

The Operator shall have aircraft loading procedures in the OM that ensure:

(i) The cargo hold is inspected before loading to:
  (a) Check for damage;
  (b) Ensure it is empty of other than documented transit load items.

(ii) The aircraft is loaded:
  (a) In accordance with written loading instructions;
  (b) In a manner that satisfies weight and balance requirements.

(iii) The load is secure and will not move during the flight;

(iv) If applicable, ULD locks are extended and locked. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** aircraft loading procedures.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** examples of documented aircraft loading instructions.
- ☐ **Observed** aircraft loading operations (focus: aircraft loaded in accordance with loading instructions/weight/balance requirements).
- ☐ **Interviewed** personnel that perform aircraft loading.
- ☐ **Other Actions** (Specify)

Guidance

Refer to IGOM 4.5.5–4.5.9 and IGOM 5 (all), as well as AHM 514 and 590 for additional guidance.

GRH 3.4.2

If the Operator transports dangerous goods as cargo, the Operator shall ensure a qualified individual is designated to be responsible for the correct loading and securing of dangerous goods on board the aircraft.

Auditor Actions

- ☐ **Identified/Assessed** process for designating qualified individual to be responsible for loading/securing dangerous goods.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.

- ☐ **Observed** aircraft loading operations (focus: qualified individual is responsible for loading/securing dangerous goods on board the aircraft).
- ☐ **Other Actions** (Specify)

GRH 3.4.3

If the Operator transports dangerous goods as cargo, the Operator shall ensure procedures are in place for the transportation of dangerous goods to/from an aircraft and the loading and securing of dangerous goods on an aircraft in a manner that:

(i) Prevents damage to packages and containers;

(ii) Provides for separation and segregation in accordance with applicable requirements;

(iii) Prevents any movement in the aircraft. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for the transportation of dangerous goods to/from an aircraft and the loading/securing of dangerous goods on an aircraft.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** transportation of cargo to/from aircraft and the loading and securing of dangerous goods (focus: handling of dangerous goods to prevent damage, prevent movement in the aircraft and maintain separation).
- ☐ **Interviewed** personnel that perform transport of and/or aircraft loading and securing of cargo shipments.
- ☐ **Other Actions** (Specify)

Guidance

Refer to DGR 9.3 for guidance that addresses the transportation, loading and securing of dangerous goods, and to DGR 10.9 for guidance that addresses securing and separation of radioactive material.

Refer to IGOM 4.5.7.7 for guidance that addresses securing of dangerous goods.

GRH 3.4.4

If the Operator transports dangerous goods as cargo, the Operator shall ensure procedures are in place that assure, when a dangerous goods package or shipment appears to be damaged or leaking:

(i) The package or shipment is prevented from being loaded into an aircraft;

(ii) If already loaded, the package or shipment is removed from an aircraft;

(iii) In the case of leakage, an evaluation is conducted to identify and prevent from transport any baggage, cargo, transport devices or other items that may have become contaminated. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for handling/addressing leaking/damaged dangerous goods shipments.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** records/documents that illustrate handling of leaking/damaged dangerous goods shipments.
- ☐ **Observed** aircraft loading operations (focus: procedures for addressing dangerous goods packages/shipments that appear to be leaking or damaged).
- ☐ **Interviewed** personnel that perform aircraft loading.
- ☐ **Other Actions** (Specify)

Guidance

Refer to DGR 9.3, 9.4 and 10.9, which contain guidance that addresses apparent damage to dangerous goods shipments.

GRH 3.4.5

If the Operator transports dangerous goods as cargo, the Operator shall ensure procedures are in place that require, when an aircraft has been contaminated by dangerous goods leakage:

(i) Hazardous contamination is removed from the aircraft without delay;

(ii) In the case of radioactive contamination, arrangements are made to take the aircraft out of service for evaluation by appropriately qualified personnel.

Auditor Actions

- ☐ **Identified/Assessed** procedures for addressing aircraft contaminated by leakage of dangerous goods.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** guidance/checklists used for dealing with an aircraft contaminated by leakage of dangerous goods.
- ☐ **Other Actions** (Specify)

GRH 3.4.6

If the Operator transports cargo, the Operator shall ensure a process is in place that requires, when undeclared or mis-declared dangerous goods are discovered in cargo during aircraft loading, a report is made to the appropriate authority of the State of the Operator (hereinafter "the State") and state of occurrence. **(GM)**

Note: *The specifications of this provision are applicable to operators that transport, and also to operators that do not transport, dangerous goods as cargo.*

Auditor Actions

- ☐ **Identified/Assessed** process for reporting undeclared/mis-declared dangerous goods discovered in cargo during aircraft loading to the appropriate authority.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** document(s) used for reporting undeclared/mis-declared dangerous goods discovered in cargo during aircraft loading.
- ☐ **Other Actions** (Specify)

Guidance

Refer to DGR 9.6 for additional guidance.

GRH 3.4.7 (Intentionally open)

GRH 3.4.8

If the Operator conducts passenger flights, the Operator shall ensure procedures are in place that prevent shipments labeled "Cargo Aircraft Only" from being loaded onto an aircraft for a passenger flight.

Auditor Actions

- ☐ **Identified/Assessed** procedure(s) for preventing shipments with "Cargo Aircraft Only" labels from being loaded onto aircraft for passenger flight.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** guidance/checklists used to ensure personnel do not load shipments with "Cargo Aircraft Only" labels onto aircraft for passenger flight.
- ☐ **Interviewed** personnel that perform aircraft loading.
- ☐ **Other Actions** (Specify)

GRH 3.4.9 (Intentionally open)

△ **GRH 3.4.10**

If the Operator conducts passenger flights and transports dangerous goods as cargo, the Operator shall ensure procedures are in place that prevent dangerous goods from being carried in an aircraft cabin occupied by passengers, except as permitted by the Authority or the DGR. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedure(s) for preventing the transport of dangerous goods in an aircraft cabin occupied by passengers, except as permitted.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** guidance/checklists used to ensure dangerous goods are not transported in an aircraft passenger cabin, except as permitted.
- ☐ **Other Actions** (Specify)

Guidance

In general, dangerous goods are prohibited from being transported in an aircraft cabin occupied by passengers. Limitations and exceptions are specified in DGR Sections 2 and 9.

△ **GRH 3.4.11**

If the Operator transports dangerous goods as cargo, the Operator shall ensure procedures are in place that prevent dangerous goods from being carried on the aircraft flight deck, except as permitted by the Authority or the DGR. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedure(s) for preventing the carriage of dangerous goods on the aircraft flight deck, except as permitted.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** guidance/checklists used to ensure dangerous goods are not carried on the aircraft flight deck, except as permitted.
- ☐ **Other Actions** (Specify)

Guidance

In general, dangerous goods are prohibited from being transported on the flight deck of an aircraft. Limitations and exceptions are specified in DGR Sections 2 and 9.

GRH 3.4.12

If the Operator conducts passenger flights and permits cargo or passenger items to be transported in the passenger seats of the aircraft cabin, the Operator shall ensure aircraft loading procedures are in place that require such cargo packages or passenger items to:

(i) Be secured by a safety belt or restraint device having enough strength to eliminate the possibility of shifting under all normal anticipated flight and ground conditions;

(ii) Be packaged or covered in a manner to avoid possible injury to passengers and cabin crew members;

(iii) Not impose any load on the seats that exceeds the load limitation for the seats;

(iv) Not restrict access to or use of any required emergency or regular exit, or aisle(s) in the cabin;

(v) Not obscure any passenger's view of the seat belt sign, no smoking sign or required exit sign. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedure(s) for loading and securing cargo/passenger items in cabin passenger seats.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.

- ☐ **Examined** guidance/checklists used for loading cargo/passenger items in cabin passenger seats.
- ☐ **Other Actions** (Specify)

Guidance

The intent of this provision is for an operator that permits the transport of cargo packages or passenger items in cabin passenger seats to have procedures that ensure such packages or items are properly loaded and secured.

Some operators might permit the transport of smaller cargo packages (e.g. mail pouches, COMAT items) secured in cabin passenger seats.

In some regulatory jurisdictions, cargo transported in the passenger cabin is required to be put inside an approved bin or container that is certified to withstand certain loads. Such bin or container is then attached or secured to a seat or seat/floor structure in a manner that ensures maximum load limits are observed.

An operator might also use approved restraining nets to cover and secure cargo in passenger seats.

Also, some operators might permit the transport of certain passenger items secured in cabin passenger seats. These types of items are typically large, valuable or fragile articles belonging to passengers that are not conducive to transport as checked baggage or appropriate for stowage in overhead bins/lockers (e.g. large musical instruments, certain electronic equipment, prominent trophies, works of art). Such items might thus be secured and carried in a dedicated cabin passenger seat (which might be purchased by the passenger-owner for this purpose).

Loading procedures for any of the above items would typically include access to technical data that ensures seat load limitations are not exceeded.

A verification that cargo packages or passenger items being transported in passenger seats are properly secured is accomplished by the cabin crew in accordance with CAB 3.2.3.

△ **GRH 3.4.13**

If the Operator conducts passenger flights, but does *not* transport cargo, the Operator shall ensure procedures are in place to identify items of cargo that are not permitted for transport and prevent such items from being loaded onto an aircraft for a passenger flight.

Auditor Actions

- ☐ **Identified/Assessed** procedure(s) for identifying/preventing prohibited cargo items from being loaded onto an aircraft for passenger flights.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** guidance/checklists used for identifying/preventing prohibited cargo items from being loaded onto an aircraft for passenger flights.
- ☐ **Interviewed** personnel that perform aircraft loading.
- ☐ **Other Actions** (Specify)

GRH 3.4.14

If the Operator conducts operations with unit load devices (ULDs), the Operator shall ensure procedures are in place for ULDs to be inspected to identify damage, and to determine airworthiness and serviceability:

(i) When a ULD is received or accepted;

(ii) Prior to a ULD being released for loading into an aircraft. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedure(s) for ULD inspection (focus: identification of airworthiness/ serviceability limits).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected inspection records and reports.

- ☐ **Interviewed** personnel that operate in sorting areas and that perform aircraft loading/unloading operations.
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of Component Maintenance Manual (CMM) and Unit Load Device (ULD).

Guidance may be found in the applicable section(s) of the IATA ULD Regulations (ULDR).

The intent of this provision is that an operator, upon receiving or accepting ULDs from another party, performs an inspection to ensure continued ULD airworthiness. Damaged or unserviceable ULDs have the potential to affect flight safety.

Inspection procedures are typically applied to ULDs whether loaded or unloaded.

Differences in damage limitations can occur between ULDs of the same manufacturer, as well as ULDs of different manufacturers. The maximum allowable damage for each specific ULD is typically stated in the applicable Component Maintenance Manual (CMM) issued by the manufacturer.

The ULD Operational Damage Limits Notice (ODLN) is normally attached to the ULD to ensure easy access to the appropriate damage limit information, and to facilitate inspection in the field (see ULDR Section 7 Standard Specification 40/3 and 40/4).

Refer to IGOM 4.5.9 for guidance that addresses ULD airworthiness and serviceability.

GRH 3.4.15

If the Operator transports outsized and/or heavy cargo, the Operator *should* have procedures that ensure such cargo is loaded, secured, and unloaded in accordance with standards specified in the OM. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedure(s) for loading, securing, unloading outsized and/or heavy cargo shipments.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** cargo loading/securing/unloading operations (focus: outsized and/or heavy cargo shipments loaded, secured, unloaded in accordance with OM standards).
- ☐ **Interviewed** personnel that load, secure and unload outsized and/or heavy cargo (focus: procedures used are in accordance with OM standards).
- ☐ **Other Actions** (Specify)

Guidance

Outsized and heavy cargo are shipments that are larger or heavier than can be accommodated in/on a ULD.

OM standards that address load securing normally include shoring and lashing instructions produced by the operator that ensure:

- Aircraft load and restraining limitations are not exceeded, including requirements for Rigid Cargo (RC) limitations for CRS, inoperative equipment.
- Lashing of heavy and outsized cargo is done (if applicable) using relevant materials and limitations for such materials are not exceeded.

△ Refer to IGOM 4.5.7 and 4.5.8, as well as AHM 454 for additional guidance.

GRH 3.4.16

If the Operator transports live animals as cargo, the Operator *should* have procedures to ensure live animals are handled, loaded, secured and unloaded in accordance with standards specified in the OM. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedure(s) for handling, loading, securing and unloading live animal cargo shipments.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** cargo loading/unloading operations (focus: live animal cargo shipments loaded, secured and unloaded in accordance with OM standards).
- ☐ **Interviewed** personnel that load live animal cargo shipments (focus: procedures used are in accordance with OM standards).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of CITES (The Convention on International Trade in Endangered Species of Wild Fauna and Flora).

OM standards that address the transport of live animals normally ensure:

- Live animal shipments are handled in accordance with the IATA Live Animals Regulations (LAR) and the IATA Airport Handling Manual (AHM).
- Operation of the aircraft air conditioning system is checked in relation to the regime of transportation specified in the LAR to avoid the possibility of a “fog” phenomenon that can result in moisture accumulation, which in turn can cause corrosion and possible activation of fire sensors in flight.
- ULDs are checked to ensure plastic sheets and adsorbent material on the bottom to prevent leakage.
- ULDs and cages are checked for visual damage and are locked to prevent animal escape during flight.
- Drinking bowl is affixed to prevent water leakage during any stage of flight.
- The NOTOC includes live animal shipments as a special load and includes the required action for control of hold heating/ventilation.

Additional requirements may be mandated by the State of Flight Departure, the State of Flight Arrival and/or CITES.

GRH 3.4.17

If the Operator transports perishables as cargo, the Operator *should* have procedures to ensure such cargo is loaded, secured and unloaded in accordance with standards specified in the OM. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedure(s) for loading, securing and unloading perishable cargo shipments.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** cargo loading/unloading operations (focus: perishable cargo shipments loaded, secured and unloaded in accordance with OM standards).
- ☐ **Interviewed** personnel that load, secure and unload perishable cargo shipments (focus: procedures used are in accordance with OM standards).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of CITES (The Convention on International Trade in Endangered Species of Wild Fauna and Flora), Perishable Cargo Regulations (PCR) and Temperature Control Regulations (TCR).

OM standards that address the transport of perishable cargo shipments normally ensure:

- Perishable cargo shipments are handled in accordance with the Perishable Cargo Regulations (PCR), AHM and, as applicable, Temperature Control Regulations (TCR).

- Operation of the aircraft air conditioning system is checked in relation to the regime of transportation specified in the LAR to avoid the possibility of a “fog” phenomenon that can result in moisture accumulation, which in turn can cause corrosion and possible activation of fire sensors in flight.
- ULDs are checked to ensure plastic sheets and adsorbent material on the bottom to prevent leakage.
- ULD contour is checked before loading/unloading to avoid aircraft damage by collapsed cargo.
- The NOTOC includes perishable shipments as a special load and includes the required action for hold heating/cooling/ventilation.

Additional requirements may be mandated by the State of Flight Departure, the State of Flight Arrival and/or CITES.

3.5 Ground Support Equipment (GSE)

GRH 3.5.1

The Operator *should* ensure practices and procedures are in place for the operation of GSE in aircraft handling operations to prevent aircraft damage and injury to personnel. Such procedures *should* ensure that GSE is:

(i) Subjected to a walkaround safety inspection prior to use;

(ii) Parked only in designated areas;

(iii) Driven safely on the apron and within the ERA;

(iv) As applicable to equipment type, operated with a load that is securely locked;

(v) Where applicable, operated with the use of guide persons;

(vi) As applicable to equipment type, operated with stabilizers, handrails, attachment fittings, transfer bridges and/or platforms correctly deployed when in position at the aircraft;

(vii) Positioned so as not to obstruct an aircraft evacuation or the free movement of other GSE. **(GM)**

Auditor Actions

☐ **Identified/Assessed** GSE operating procedures in the OM (focus: includes general procedures for the operation of GSE; includes or addresses procedures for the operation of the specific types of GSE used in operations).

☐ **Interviewed** responsible manager(s) in ground handling operations.

☐ **Examined** procedures for the operation of selected types of GSE used in operations (focus: procedures are in accordance with the specifications in this recommenced practice).

☐ **Observed** aircraft ground handling operations (focus: different types of GSE are operated in accordance with the specifications in this recommended practice and procedures in the OM).

☐ **Other Actions** (Specify)

Guidance

Refer to IGOM Chapters 3 and 4 for guidance that addresses safe operation of ground support equipment. Additional guidance may be found in AHM 462.

GRH 3.5.2

If the Operator conducts passenger flights and uses passenger boarding bridges, the Operator *should* ensure procedures are in place that require boarding bridges to be:

(i) Fully retracted or parked in the designated parking position prior to aircraft arrival and departure movement;

(ii) Moved slowly to the aircraft cabin access doors;

(iii) Engaged using the auto levelling safety system;

(iv) Secured to prevent movement from non-authorized persons. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** boarding bridge operating procedures in the OM (focus: includes or addresses procedures for the operation of boarding bridges).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Observed** aircraft ground handling operations (focus: passenger boarding bridge operated in accordance with the specifications in this recommended practice and procedures in the OM).
- ☐ **Other Actions** (Specify)

Guidance

Documented procedures in accordance with IGOM 3.1.3.5 (Passenger Boarding Bridge) will typically demonstrate documental conformity with the specifications in this provision.

GRH 3.5.3

The Operator shall ensure a program is in place for the maintenance of ground support equipment, which assures:

(i) A preventive maintenance program plan for each type of equipment;

(ii) Maintenance completed on such equipment is recorded;

(iii) Such equipment remains serviceable and in good mechanical condition.

Auditor Actions

- ☐ **Identified/Assessed** maintenance program for GSE.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected GSE inspection/maintenance schedules/records.
- ☐ **Observed** aircraft ground handling operations (focus: GSE is serviceable/in good mechanical condition; completed maintenance recorded).
- ☐ **Other Actions** (Specify)

3.6 Airside Event Response and Reporting

GRH 3.6.1

The Operator shall ensure an emergency management plan is in place for responding to accidents or other emergencies that may occur during aircraft ground handling operations. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** emergency management plan for ground handling operations.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** guidance/checklists used for response to emergencies in ground handling operations.
- ☐ **Examined** selected records of emergency response exercises performed in accordance with the ERP.
- ☐ **Other Actions** (Specify)

Guidance

An emergency management plan may also be known as a crisis or contingency management plan. It is a control mechanism to manage response procedures to a very serious situation (i.e. crisis) prior to that situation becoming a disaster. Control is achieved through preparation and the capability to implement emergency actions in a timely manner.

Typical elements of an emergency management plan include ownership, crisis management team, communication and a control center.

To ensure continuing effectiveness, testing of an emergency management plan is typically undertaken periodically against various crisis scenarios.

Refer to AHM 620 for guidance that addresses ground handling event response and reporting.

GRH 3.6.2

The Operator shall ensure procedures are in place for responding to emergencies that require the evacuation of an aircraft during the conduct of ground handling operations. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for responding to emergency aircraft evacuation during ground handling operations.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** guidance/checklists used for response to aircraft evacuation during ground handling operations.
- ☐ **Other Actions** (Specify)

Guidance

Refer to IGOM 6.5.3 for guidance that addresses aircraft evacuation. Additional guidance may be found in AHM 620.

GRH 3.6.3

The Operator shall ensure procedures are in place for response to ground handling incidents. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for responding to incidents that occur in ground handling operations.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** guidance/checklists used for response to incidents in ground handling operations.
- ☐ **Examined** selected records of responses to ground handling incidents.
- ☐ **Other Actions** (Specify)

Guidance

Refer to IGOM 6.5 for guidance that addresses incident notification and immediate actions. Additional guidance may be found in AHM 650 and 652.

GRH 3.6.4

The Operator *should* ensure a process is in place for the retention of records of accidents and incidents associated with aircraft ground handling operations. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** process for retention of records of ground handling operations accidents/incidents.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected records of ground handling operations accidents/incidents (focus: records retained as defined by applicable process).
- ☐ **Other Actions** (Specify)

Guidance

Refer to AHM 650 for guidance that addresses ground handling event records retention.

△ **GRH 3.6.5**

The Operator shall ensure a process is in place that requires dangerous goods accidents and dangerous goods incidents to be reported to the appropriate authority of the State and the state in which the accident or incident occurred, and such reports are in accordance with the reporting requirements of the appropriate authorities. **(GM)**

Note: *The specifications of this provision are applicable to operators that transport, and also to operators that do not transport, dangerous goods as cargo.*

Auditor Actions

- ☐ **Identified/Assessed** process for reporting dangerous goods accidents/incidents.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** guidance used for reporting dangerous goods accidents/incidents.
- ☐ **Examined** selected dangerous goods accident/incident reporting records (focus: reporting in accordance with reporting requirements of the appropriate authorities).
- ☐ **Examined** selected dangerous goods accident/incident reports.
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of State.

△ Guidance may be found in DGR 9.6.1 and 9.6.2.

3.7 Security

GRH 3.7.1

The Operator shall ensure procedures are in place for, as determined by risk assessment, securing an aircraft prior to and during overnight or layover parking. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for securing of aircraft when parked (at all stations).
- ☐ **Interviewed** manager/person(s) responsible for parking of aircraft.
- ☐ **Observed** aircraft being secured.
- ☐ **Other Actions** (Specify)

Guidance

Securing procedures typically ensure aircraft:

- Are searched prior to parking to ensure no persons are on board;
- Are parked only in secure areas within an airport operating area;
- Are parked under conditions that permit maximum security and protection;
- △ Doors or panels giving access to the aircraft are closed and locked or sealed and steps are removed while parked;
- ☐ Are sealed or locked if the aircraft is accessible from the ground or passenger loading bridge.

Aircraft search and sealing procedures are typically contained in an operator's relevant manual(s) and included in the security training curriculum.

Guidance that addresses aircraft security may be found in AHM 621.

GRH 3.7.2

If the Operator conducts international flights, and if required by the relevant national authority, the Operator shall ensure procedures are in place for the conduct of an aircraft security check or an aircraft security search at the originating location of an international flight to ensure no prohibited items are introduced in the aircraft prior to the departure of an international flight. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for conducting aircraft security checks or aircraft security searches for locating prohibited items (focus: dedicated security check/search control points defined in accordance with aircraft type).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Sampled** selected records of previous aircraft security checks for prohibited items.
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of International Flights.

The need for a security check or a security search is typically based upon a security risk assessment accomplished by the Operator and/or the relevant national authorities.

Trained and competent security personnel, aircraft crew members or other qualified personnel typically conduct searches and checks of aircraft.

Guidance material is typically made available by the operator for aircraft preflight checks and searches under normal circumstances, higher threat situations, and emergency situations.

As a general rule, the security checks would include:

- An inspection of the exterior of the aircraft, with special attention to wheel bays and technical areas;
- A comprehensive inspection of the interior of the aircraft, including the passenger cabin area, seats, overhead luggage lockers, toilets, galleys and other technical areas such as the flight deck. The focus is on areas that are readily accessible without the use of common tools. To facilitate the search, panels that can be sealed are sealed, to show their integrity has not been compromised.

A security search is a more thorough than a security check, and typically includes an in-depth inspection of the interior and exterior of the aircraft.

To promote competent security searches, aircraft security search checklists are normally made available for each type and configuration of aircraft. Such checklists are restricted documents and personnel with a need to know are typically trained on how to obtain a copy. A security search is very specific and therefore there may be a separate checklist for each aircraft model and type in use by the operator.

When the checklist is completed, it is verified by the person responsible for conducting the inspection and is retained on file at the station where the inspection took place.

To be effective, aircraft checks and searches are typically carried out in good lighting conditions, or personnel performing such activities are provided with lighting sufficient for the purpose.

Aircraft access control is typically imposed prior to commencing a search, and the search is normally conducted with the minimum number of persons on board. Such measures would be taken to ensure devices are not introduced into the aircraft once it has been cleared. Control of access is then typically maintained until the aircraft doors are closed prior to flight departure.

GRH 3.7.3

If the Operator conducts international passenger flights that transit an airport, the Operator shall ensure procedures are in place to ensure any items left behind by disembarking passengers from such transit flights are removed from the aircraft or otherwise addressed appropriately before the flight departure. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures to remove or address items left behind by disembarking passengers on transit fights.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected records of actions performed to address passenger items left on board the aircraft on transit flight.
- ☐ **Other Actions** (Specify)

Guidance

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△ Measures are typically implemented to search the cabin during the aircraft transit period to prevent disembarking passengers from leaving any article on board.

The operator may allow passengers to disembark during the transit period and then have the cabin searched.

If the operator opts to have transit passengers remain on board the aircraft during the transit stop, such passengers remaining on board are typically asked to positively identify their belongings, perhaps by placing them on their laps, while the security check or search is performed.

Any articles found are typically treated as suspect and appropriate measures are taken to remove them from the aircraft.

△ **GRH 3.7.4**

If the Operator transports cargo, the Operator shall have processes to ensure cargo for transport on any flight is protected from unauthorized interference from the point of acceptance after screening or security controls have been applied until arrival at airport of destination. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** process(es) for protecting cargo shipments from unauthorized interference.
- ☐ **Interviewed** responsible manager(s).
- ☐ **Observed** cargo handling and loading operations (focus: cargo is provided protection from unauthorized interference).
- ☐ **Other Actions** (Specify)

Guidance

△ The operator is responsible for ensuring cargo is protected from unauthorized interference from the point of acceptance and after screening (or after the application of security controls) until loaded onto the aircraft for departure. Such requirements are applicable to any intermediate stop, including fuel or technical stops. The intent of this provision is that such protection is provided at all times when cargo is in the custody of personal performing ground handling operational functions.

See the Applicability box at the beginning of this section for functions within the scope of ground handling operations.

GRH 3.7.5

If the carriage of weapons on board an aircraft is approved as specified in SEC 3.3.1, the Operator shall have a procedure to ensure the pilot-in-command (PIC) is notified prior to the commencement of a flight. If permitted by the states involved, such notification shall include the number and seat locations of authorized armed persons on board the aircraft.

Note: *The content of the notification to the PIC may vary as specified in SEC 3.3.1.*

Auditor Actions

- ☐ **Identified/Assessed** the procedure for notifying the PIC of the presence of armed law enforcement officers, including disclosure of seat number and location if permitted by states involved.
- ☐ **Identified/Assessed** the method(s) used to notify the PIC.
- ☐ **Examined** selected records of instances that describe PIC notification of weapons on board.
- ☐ **Interviewed** responsible manager(s).
- ☐ **Other Actions** (Specify)

GRH 3.7.6

If the Operator conducts passenger flights, the Operator shall have a process to ensure procedures are in place for the notification of the PIC, prior to the commencement of a flight, when passengers are to be transported who are obliged to travel because they have been the subject of judicial or administrative proceedings.

Auditor Actions

- ☐ **Identified/Assessed** process(es) to inform the PIC of the presence of passengers subjected to administrative or judicial proceedings.
- ☐ **Identified/Assessed** methods used to notify the PIC of passengers on board because they have been the subject of judicial or administrative proceedings.

- ☐ **Examined** selected records of instances that describe PIC notification of passengers on board because they have been the subject of judicial or administrative proceedings.
- ☐ **Interviewed** responsible manager(s).
- ☐ **Other Actions** (Specify)

GRH 3.7.7

If the Operator conducts international passenger flights, the Operator shall have a process to ensure hold baggage is protected from unauthorized interference from the point it is screened or accepted into the care of the Operator until departure of the international flight transporting the baggage.

Auditor Actions

- ☐ **Identified/Assessed** process(es) to ensure screened checked baggage is protected from unauthorized interference.
- ☐ **Observed** the protection of hold baggage from unauthorized interference until departure of the aircraft transporting the baggage.
- ☐ **Interviewed** responsible manager(s).
- ☐ **Observed** passenger/baggage handling operations (focus: process for protecting hold baggage from unauthorized interference after screening or acceptance by the operator, until loaded onto an aircraft prior to the departure of an international passenger flight).
- ☐ **Other Actions** (Specify)

GRH 3.7.8

If the Operator conducts international passenger flights, the Operator shall have a process to ensure procedures are in place to record information associated with international hold baggage that has met criteria in accordance with SEC 3.6.1 and 3.6.6.

Auditor Actions

- ☐ **Identified** hold baggage criteria specified in SEC 3.6.1 and 3.6.6.
- ☐ **Identified/Assessed** process(es) for recording information associated with hold baggage that has met criteria in accordance with SEC 3.6.1 and 3.6.6.
- ☐ **Interviewed** personnel that authorize the transport of unaccompanied hold baggage.
- ☐ **Interviewed** responsible manager(s).
- ☐ **Examined** selected unaccompanied hold baggage screening records.
- ☐ **Other Actions** (Specify)

GRH 3.7.9

If the Operator conducts passenger flights, the Operator shall have a process to ensure secure storage areas have been established where mishandled passenger baggage may be held until forwarded, claimed or disposed of in accordance with local laws. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** process(es) to provide secure storage of mishandled hold baggage.
- ☐ **Interviewed** responsible manager(s).
- ☐ **Observed** passenger/baggage handling operations (focus: secure areas are used for holding mishandled baggage until forwarded, claimed or disposed of).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for definitions of Mishandled Baggage, Unidentified Baggage and Unclaimed Baggage.

Mishandled baggage is usually the result of the baggage having:

- Been incorrectly tagged;
- Arrived without a tag;
- Missed a connecting flight;
- Been carried on the wrong flight.

Such baggage is held in a locked and secure storage cage or room. Access and key control is properly supervised and the baggage subjected to additional screening before being loaded into an aircraft.

Unclaimed baggage is kept for a period of time, as prescribed by the local authority, and disposed of through that authority as unclaimed property.

The process for forwarding mishandled baggage is described in IATA Resolution 743a.

GRH 3.7.10

If the Operator conducts International passenger flights, the Operator shall have a process to ensure transfer hold baggage for such flights *either*:

(i) Is subjected to screening prior being loaded onto the aircraft, *or*

(ii) Has been screened at the point of origin and subsequently protected from unauthorized interference from the point of screening at the originating airport to the departing flight at the transfer airport.

Auditor Actions

☐ **Identified/Assessed** the process(es) to ensure transfer hold baggage for international flights is subjected to screening prior to being loaded, where applicable.

☐ **Identified** the process(es) to determine that hold baggage does not need to be rescreened at a point of transfer, where applicable.

☐ **Interviewed** responsible manager(s).

☐ **Observed** passenger/baggage handling operations (focus: processes for ensuring international transfer hold baggage has been screened and protected from unauthorized interference prior to being loaded onto an aircraft).

☐ **Other Actions** (Specify)

GRH 3.7.11

If the Operator conducts domestic passenger flights, the Operator *should* have a process to ensure transfer hold baggage for a domestic passenger flight *either*:

(a) Is subjected to screening prior being loaded into an aircraft, *or*

(b) Has been screened at the point of origin and subsequently protected from unauthorized interference from the point of screening at the originating airport to the departing aircraft at the transfer airport.

Auditor Actions

☐ **Identified/Assessed** process(es) to ensure all transfer hold baggage is subjected to screening prior to being loaded, where applicable.

☐ **Interviewed** responsible manager(s).

☐ **Observed** passenger/baggage handling operations (focus: process for ensuring transfer hold baggage has been screened/protected from unauthorized interference prior to being loaded onto an aircraft for a domestic passenger flight).

☐ **Other Actions** (Specify)

4 Special Aircraft Ground Handling Operations

4.1 Aircraft Fueling

GRH 4.1.1

The Operator shall have processes to ensure fuel suppliers are maintaining standards of fuel safety and quality acceptable to the Operator and fuel delivered and loaded onto aircraft is:

(i) Of the correct grade and specification for each aircraft type;

(ii) Free from contamination. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** process for monitoring of fuel quality at all locations where aircraft are refueled.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected quality control inspection reports (focus: fuel supply quality management).
- ☐ **Other Actions** (Specify)

Guidance

The intent of this provision is to ensure fuel is stored, handled and serviced in accordance with accepted standards.

Approved fuel specifications are contained in each aircraft manual.

To ensure fuel corresponds to the specifications and grade of product necessary for the applicable aircraft type(s), a control process is typically in place at each location where the operator has aircraft fueling operations. Such process ensures the existence of periodic inspections of critical aspects of the fuel supply system at each applicable location, to include, as a minimum:

- Fuel facilities;
- Safety and quality procedures;
- Performance levels of personnel.

Processes for ensuring fuel is of the correct grade and free of contamination may be documented in maintenance, ground operations or flight operations manuals, or in a combination thereof.

If the Operator uses biofuels, additional procedures would typically address the related specific requirements (i.e. dedicated infrastructures and blending requirements).

Additional guidance may be found in the IFQP (IATA Fuel Quality Pool) Quality and Safety Procedures and in the ICAO Manual on Civil Aviation Jet Fuel Supply (Doc 9977).

GRH 4.1.2

The Operator shall ensure, during fuelling operations with passengers embarking, on board or disembarking the aircraft, procedures are in place that provide for the designation of a person with responsibility for fueling operations and specify the method(s) by which that responsible person:

(i) Communicates with the flight crew or other qualified personnel on board the aircraft;

☐ (ii) Provides notification to the flight crew or other qualified personnel on board the aircraft when a hazardous condition or situation has been determined to exist;

△ (iii) Provides notification to the flight crew or other qualified personnel on board the aircraft and other appropriate personnel engaged in aircraft ground handling activities when fueling is about to begin and has been completed. **(GM)**

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☐ ***Note:*** *Notification when fueling is about to begin and has been completed as in iii. maybe replaced by an equivalent procedural means which ensure the flight crew or other qualified personnel on board the aircraft are aware of fueling operations and are in a position to, if necessary, perform an expeditious evacuation of the aircraft.*

Auditor Actions

- ☐ **Identified/Assessed** procedures for communication between ground and onboard personnel during aircraft fuelling operations.
- ☐ **Interviewed** person(s)/manager(s) responsible for fuelling operations.
- ☐ **Interviewed** selected aircraft fuelling supervisory personnel.
- ☐ **Observed** aircraft ground handling operations (focus: establishment of method for ground-aircraft communication during aircraft fuelling operations).
- ☐ **Coordinated** with flight operations and cabin operations to verify complementary procedures for communication with ground personnel during aircraft fuelling operations.
- ☐ **Other Actions** (Specify)

Guidance

Ground handling personnel would typically need to have a clear understanding of all required communication procedures and have the ability to execute such procedures in an expeditious manner should a dangerous situation develop.

The specification in item ii) may be satisfied by *either*:

- Equivalent procedural means, acceptable to the State and applicable authorities, that would permit the flight crew or other qualified persons to be aware of the start and completion of fuelling operations, *or*
- △ Procedures established by the operator that would ensure qualified personnel on board the aircraft are continuously in a position to perform an expeditious evacuation of the aircraft for any reason, including a fuel spill or fire.

Suitable methods of communication with the flight crew or other qualified personnel on board the aircraft include use of the aircraft inter-communication system, direct person-to-person contact or other methods that ensure direct and timely communication. Use of the aircraft inter-communication system to maintain continuous two-way communication during fuelling operations is not a requirement.

The following roles and main responsibilities of participating personnel typically involve the following:

- Other qualified personnel on board the aircraft remain at a specified location during fuelling operations and are capable of handling emergency procedures associated with fire protection and fire-fighting, and communicating, initiating and directing an evacuation as specified by the operator. Such personnel are qualified by the operator to assume and perform flight crew and/or cabin crew responsibilities and duties during fuelling operations with passengers on board the aircraft.
- △ Flight crew or other qualified personnel on board the aircraft (e.g. cabin crew) are in a position to perform an expeditious evacuation of the aircraft and are aware of the state of fuelling operations. Such qualified personnel are responsible for two-way communication being established and maintained with personnel that are responsible for fuelling operations.
- A person is responsible for supervising fueling operations and maintaining two-way communication with the flight crew or other qualified personnel on board the aircraft (via the aircraft interphone communication system or other suitable means). Such person ensures an appropriate notification to qualified personnel on board the aircraft when fueling is about to begin, has been completed and when a hazardous condition or situation has been determined to exist. Such person also is responsible for communication with other appropriate personnel engaged in aircraft ground handling activities to ensure safe ramp conditions are maintained during fueling operations with passengers on board.
- Other appropriate personnel engaged in aircraft ground handling activities are responsible for maintaining safe ramp conditions during fueling operations, which includes, but is not limited to:
  - Embarkation or disembarkation path is not obstructed by GSE;
  - Aircraft handling operations do not create a hazard or obstruct emergency exits;

– Ground areas beneath nominated exit doors are kept clear of any obstructions that would impede an emergency evaluation.

Criteria that identify the commencement of aircraft fueling typically include conditions such as the fueling vehicle being in position and bonded to the aircraft and the fueling hose-end nozzle being connected to the aircraft fuel adapter. Criteria that identify completion of aircraft fueling typically include conditions such as the hose-end nozzle disconnected from the aircraft fuel adapter, the hydrant pit/inlet hose is disconnected (if applicable), bonding cables are detached, the fuel receipt (slip) is processed, there are no leaks or spills identified and the fueling vehicle is ready to leave its position (as applicable based on fueling vehicle operator's walk-around check performed).

Additional guidance may be found in AHM 462 Item 9.5, as well as the ICAO Airport Services Manual, Document 9137 (ASM), Part 1.

GRH 4.1.3

The Operator shall ensure procedures are in place for fueling operations that provide for, in the event of a fuel spill, immediate and follow-up actions to assure:

(i) Fueling is stopped;

(ii) Appropriate ground response personnel or airport fire service is summoned, as applicable;

(iii) Notification of the flight crew or other qualified persons on board the aircraft. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures associated with a fuel spill during aircraft fueling operations.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Interviewed** selected aircraft fueling supervisory personnel.
- ☐ **Observed** aircraft ground handling operations (focus: implementation of procedures for addressing fuel spill during aircraft fueling operations).
- ☐ **Other Actions** (Specify)

Guidance

Refer to IGOM 3.2.2 for guidance that addresses fuel spillage.

GRH 4.1.4

The Operator *should* ensure procedures are in place for fuelling operations that establish a fuelling safety zone and specify restrictions and limitations for the use of devices, conduct of activities and operation of vehicles and ground support equipment within the safety zone. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** safety procedures for aircraft fueling operations (focus: establishment of safety zone are included/addressed in fueling procedures).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Interviewed** selected aircraft fueling supervisory personnel.
- ☐ **Observed** aircraft ground handling operations (focus: implementation of procedures for establishing fueling safety zone during aircraft fueling operations).
- ☐ **Other Actions** (Specify)

Guidance

Procedures typically specify the fueling safety zone as the area within a radius of at least three meters (ten feet), or as specified by local regulations, from filing and venting points of the aircraft, hydrant pits, fueling vehicle and its hoses in use.

Limitations and restrictions in a fueling safety zone typically preclude the use or activation of:

- Items that could be sources of ignition or fire (e.g. matches, welding equipment, flashbulbs);
- Portable electronic devices with proper separation distance from aircraft fuel vents and/or fueling equipment (e.g. mobile telephones, portable radios, pagers).

Refer to IGOM 3.2.1 for guidance that addresses fueling safety zone. Additional guidance may be found in AHM 462 Item 2.9.2 and 9.3, as well as the ICAO ASM, Part 1.

GRH 4.1.5

The Operator shall ensure safety procedures associated with aircraft fueling operations are in place that assure, during fueling operations with passengers on board the aircraft:

(i) The ground area beneath aircraft exit doors that have been designated for rapid deplaning or emergency evacuation is kept clear of obstructions;

(ii) Where a boarding bridge is in use, an interior access path is maintained from the aircraft to the terminal;

(iii) Where a passenger boarding bridge is not in use, aircraft passenger steps or an alternate means of emergency evacuation is in place. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** safety procedures for aircraft fueling operations (focus: specifications of this standard are included/addressed in fueling procedures).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Interviewed** selected aircraft fueling supervisory personnel.
- ☐ **Observed** aircraft ground handling operations (focus: implementation of safety procedures during aircraft fueling operations).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definition of Integral Airstairs.

When deployed, integral airstairs are acceptable as an alternate means of emergency evacuation.

Refer to IGOM 3.2.3 for GSE positioning for aircraft refueling operations. Additional guidance may be found in AHM 462, as well as the ICAO ASM, Part 1.

GRH 4.1.6

The Operator *should* ensure safety procedures associated with aircraft fuelling operations are in place that require, during fuelling operations:

(i) Establishment of a bonding connection between the fuelling vehicle and aircraft to provide for dissipation of electrical energy that may develop;

(ii) Prohibition from connecting or disconnecting electrical equipment to the aircraft;

(iii) Prevention of damage to the fuel hose;

(iv) Cessation of aircraft fuelling when it is determined lightning is a threat. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** safety procedures for aircraft fuelling operations (focus: specifications of this standard are included/addressed in fuelling procedures).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Interviewed** selected aircraft fuelling supervisory personnel.
- ☐ **Observed** aircraft ground handling operations (focus: implementation of safety procedures during aircraft fuelling operations).
- ☐ **Other Actions** (Specify)

Guidance

Guidance may be found in AHM 462 Item 9.4.

GRH 4.1.7

The Operator shall ensure procedures are in place for summoning the rescue and firefighting service in the event of a fire or major fuel spill. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** safety procedures for aircraft fuelling operations (focus: procedures for summoning rescue and firefighting service in the event of fire or major fuel spill).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Interviewed** selected aircraft fuelling supervisory personnel.
- ☐ **Observed** aircraft ground handling operations (focus: implementation of procedures for addressing fire/major fuel spill during aircraft fuelling operations).
- ☐ **Other Actions** (Specify)

Guidance

A major fuel spill is defined as one that cannot be contained by the fuelling personnel that are present on site.

An awareness of procedures by personnel involved with the fuelling operation is critical should it become necessary to summon the Airport Fire Service in the event of a fuel spill or kerosene contamination.

Additional emergency procedures following a fuel spill are contained in the Sec 9.6 of the AHM 462.

4.2 Aircraft De-/Anti-icing

GRH 4.2.1

If the Operator conducts flights from any airport when conditions are conducive to ground aircraft icing, the Operator shall have a De-/Anti-icing Program, which, if applicable, is approved by the Authority and, as a minimum:

(i) Ensures adherence to the Clean Aircraft Concept;
(ii) Defines responsibilities within the Program;
(iii) Addresses applicable locations within the route network;
(iv) Defines areas of responsibility;
(v) Specifies technical and operational requirements;
(vi) Specifies training and qualification requirements;
(vii) Is applicable to external service providers that perform de-/anti-icing functions for the Operator. **(GM)**

Note: *The specifications of this provision are applicable to both commercial and non-commercial operations.*

Auditor Actions

- ☐ **Identified/Assessed** approved aircraft de-/anti-icing program (focus: all applicable locations within the route network are addressed; non-commercial operations are accounted for).
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** de-/anti-icing program at selected airports (focus: de-/anti-icing program requirements and areas of responsibilities are addressed as per selected airport's local conditions).
- ☐ **Examined** reports that detail past de-/anti-icing operations at selected airports (focus: de-/anti-icing operations performed by external service providers are continuously reported to the operator).
- ☐ **Other Actions** (Specify)

Guidance

Refer to the IRM for the definitions of De-/Anti-icing Program and Clean Aircraft Concept.

A de-/anti-icing program would address not only commercial operations at an applicable airport but, if applicable, non-commercial operations as well (e.g. positioning flights, test flights, training flights).

The scope and details of a de-/anti-icing program would typically be commensurate with the frequency and complexity of operations at airports with the potential for ground icing conditions.

△ Additional guidance may be found in ICAO Doc 9640-AN/940, Manual of Aircraft Ground De-icing/Anti-icing Operations, Part 1, Chapter 3, in SAE AS6285, Aircraft Ground Deicing/Anti-Icing Processes and in SAE AS6286 Aircraft Ground Deicing/Anti-Icing Training and Qualification Program. The latter two are used as the basis for inspections conducted under the IATA De-Icing/Anti-Icing Quality Control Pool (DAQCP).

GRH 4.2.2

If the Operator has a De-/Anti-icing Program, the Operator shall ensure policies and procedures are in place that result in:

(i) Standardized methods of fluid application;

(ii) Compliance with specific aircraft limitations;

(iii) A clean aircraft through proper treatment of applicable surfaces. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** policies and procedures for aircraft de-/anti-icing.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** checklist(s) used for de-/anti-icing operations.
- ☐ **Interviewed** personnel that perform operational functions in aircraft de-/anti-icing operations.
- ☐ **Examined** selected quality control inspection reports (focus: aircraft de-/anti-icing operations).
- ☐ **Interviewed** supervisory personnel for aircraft de-/anti icing operations.
- ☐ **Other Actions** (Specify)

Guidance

To ensure desired results, an operator's de-/anti-icing program would typically include policies and procedures that:

- Define equipment for and methods of applying de-icing and anti-icing fluid to produce an aircraft free of contamination (clean aircraft);
- Specify a sequence for fluid application to the applicable aircraft surfaces and define specific methods and techniques for applying fluid to each individual surface;
- Provide limitations that are to be observed to successfully complete the process, including correct fluid mixtures, fluid temperatures and nozzle pressure.

△ Additional guidance may be found in ICAO Doc 9640-AN/940, Manual of Aircraft Ground De-icing/Anti-icing Operations, Part 3, Chapter 8, and in SAE AS6285, Aircraft Ground Deicing/Anti-Icing Processes.

GRH 4.2.3

If the Operator has a de-/anti-icing program, the Operator *should* have a process to ensure the availability and use of adequate facilities and equipment for aircraft de-/anti-icing operations at applicable locations.

Auditor Actions

- ☐ **Identified/Assessed** requirements for facilities and equipment in de-/anti-icing program.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** records/documents that specify facilities/equipment at selected airports identified as having potential for ground icing conditions (focus: facilities/equipment in accordance with de/anti-Icing program standards).
- ☐ **Interviewed** supervisory personnel for aircraft de-/anti icing operations.
- ☐ **Other Actions** (Specify)

GRH 4.2.4

If the Operator has a de-/anti-icing program, the Operator shall ensure fluids used in de-icing and anti-icing operations are:

(i) Stored, handled and applied in accordance with criteria established by the Operator, fluid manufacturer and aircraft manufacturer;

(ii) Manufactured in accordance with SAE specifications. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** process for management/monitoring of de-/anti-icing fluid quality at applicable locations.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** records/documents that detail quality management of de-/anti-icing fluids at selected locations.
- ☐ **Examined** selected records/reports resulting from monitoring and supervision of aircraft de-/anti-icing operations (focus: aircraft de-/anti-icing fluid usage in accordance with established criteria; fluid conformity to SAE specifications is under supervision and quality control/monitoring program).
- ☐ **Interviewed** supervisory personnel for aircraft de-/anti icing operations.
- ☐ **Other Actions** (Specify)

Guidance

To be effective, an operator's de-/anti-icing program would typically include policies and procedures that ensure the following:

- Fluids used in the de-/anti-icing process are manufactured in accordance with the relevant SAE specifications and meet use criteria established by the operator, fluid manufacturer and aircraft manufacturer;
- The appropriate types of fluids (Types I, II, III or IV) are used in the proper manner for conditions under which de-icing and anti-icing operations are being conducted, each diluted as required to achieve desired results;
- Fluids are handled in accordance with recommendations of the fluid manufacturer and effectiveness is not degraded due to contamination.

Additional guidance may be found in ICAO Doc 9640-AN/940, Manual of Aircraft Ground De-icing/Anti-icing Operations, Chapter 11.

GRH 4.2.5

If the Operator has a De-/Anti-icing Program, the Operator shall ensure procedures are in place for ground handling personnel to communicate with the flight crew to assure:

(i) The aircraft is properly configured prior to beginning the de-/anti-icing process;

(ii) The flight crew receives all necessary information relevant to fluid(s) applied to the aircraft surfaces;

(iii) The flight crew receives confirmation of a clean aircraft;

(iv) The flight crew receives an “all clear” signal at the completion of the de-/anti-icing process and prior to aircraft movement. **(GM)**

Auditor Actions

- ☐ **Identified/Assessed** procedures for communication between ground personnel and flight crew during aircraft de-/anti-icing operations.
- ☐ **Interviewed** responsible manager(s) in ground handling operations.
- ☐ **Examined** selected records/reports resulting from supervision of aircraft de-/anti-icing operations (focus: ground-aircraft communication procedures).
- ☐ **Examined** selected records/reports of quality control inspection (focus: ground aircraft communication procedures).

- ☐ **Interviewed** supervisory personnel for aircraft de-/anti icing operations.
- ☐ **Other Actions** (Specify)

Guidance

To ensure effective communications during de-/anti-icing operations, an operator's de-/anti-icing program would typically include policies and procedures that ensure the following:

- All necessary communications between ground handling personnel and the flight crew prior to and after completion of the de-/anti-icing process are defined;
- Ground handling personnel provide the flight crew with final information that verifies the aircraft is in compliance with the Clean Aircraft Concept.

Additional guidance may be found in ICAO Doc 9640-AN/940, Manual of Aircraft Ground De-icing/Anti-icing Operations, Chapter 10.