U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: 14 CFR Part 121 and Part 135 Dangerous Goods Transportation Operations

Date: 12/13/17

AC No: 121-40

Initiated By: AXH-1

This Advisory Circular (AC) provides certificate holders with recommended contents for a dangerous goods training program and manual designed to guide and manage dangerous goods operations. Developing and using the comprehensive guidance in this document will promote the establishment of a safe and efficient dangerous goods operation. This AC establishes guidance for all part 119 certificate holders operating in accordance with part 121 or part 135 under operations specifications (OpSpec) to carry dangerous goods (Will Carry), prohibiting the transport of dangerous goods (Will Not Carry) and/or authorized to transport passengers and their baggage. Specifically, this AC sets forth suggestions for establishing a comprehensive dangerous goods training program and manual, regardless of the certificate holder's OpSpec.

Dangerous goods are known to have been involved in, and the cause of, incidents and accidents associated with air transportation. A certificate holder's dangerous goods program constitutes the foundation for safely transporting dangerous goods by air. This AC provides guidance on designing and implementing a dangerous goods program to include managing the risks entering the aviation system from declared and undeclared dangerous goods. Passengers and shippers of cargo routinely introduce hazards associated with dangerous goods into the air transport system, often unknowingly. This includes dangerous goods associated with baggage, cargo, and COMAT. Improperly prepared and mismanaged dangerous goods can increase the risks to passengers, crew, aircraft, property, and environment. The hazards posed by these materials are often varied and difficult to specifically identify. Therefore, the risks are best addressed by individual certificate holders within the context of their own systems. This AC is not mandatory, and does not constitute a regulation. This AC describes an acceptable means, but not the only means, of complying with applicable regulations to manage dangerous goods operations.

Janet McLaughlin
Director
Hazardous Materials Safety

CONTENTS

CONTENTS (CONTINUED)

CONTENTS (CONTINUED)

CHAPTER 1. GENERAL INFORMATION

1.1 Purpose of this Advisory Circular (AC).

This AC provides certificate holders with recommended contents for a dangerous goods training program and manual designed to guide and manage dangerous goods operations. Developing and using the comprehensive guidance in this document will promote establishment of a safe and efficient dangerous goods operation. This AC provides guidance for all certificate holders and applicants under 14 CFR part 121 or part 135 on the following:

- Developing dangerous goods training programs applicable to personnel providing a transport-related job function for, or on behalf of, the certificate holder;
- Implementing operational Safety Management Systems (SMS), and the structure of their risk analysis as they relate to dangerous goods; and
- Developing the manual for dangerous goods transportation/rejection as cargo or baggage, and a plan to prevent undeclared dangerous goods.

1.2 Intended Audience.

1.2.1 Primary Audience.

The primary audience for this AC is all certificate holders, or applicants seeking to operate, under either 14 CFR part 121 or part 135, and all such carriers, regardless of whether they have implemented a Safety Management System. It includes certificate holders that:

- Transport passengers and their baggage;
- Transport cargo or company material (COMAT), with a prohibition on transporting dangerous goods aboard the aircraft ("Will Not Carry" certificate holder with no OpSpec A055 issue and prohibited under OpSpec A004 limitations); and
- Transport dangerous goods as cargo or COMAT aboard the aircraft ("Will Carry" certificate holder with OpSpec A055 issued and listed under OpSpec A004 authorizations).

Note: Although this AC is addressed mainly to 121 and 135 certificate holders, 125 certificate holders are encouraged to comply with the contents of the training program and manual presented as best practice.

1.2.2 Secondary Audience.

The secondary audience for this AC is all Federal Aviation Administration personnel responsible for dangerous goods transportation certification, surveillance, and safety oversight activities.

1.3 Background.

Dangerous goods are known to have been involved in, and the cause of, incidents and accidents associated with air transportation. A certificate holder's dangerous goods program constitutes the foundation for safely transporting dangerous goods by air. This AC provides guidance on designing and implementing a dangerous goods program to include managing the risks entering the aviation system from declared and undeclared dangerous goods. Passengers and shippers of cargo routinely introduce hazards associated with dangerous goods into the air transport system, often unknowingly. This includes dangerous goods associated with baggage, cargo, COMAT, and mail. Improperly prepared and mismanaged dangerous goods can increase the risks to passengers, crew, aircraft, property, and environment. The hazards posed by these materials are often varied and difficult to specifically identify. Therefore, the risks are best addressed by individual certificate holders within the context of their own systems. To guide the certificate holders in the process of addressing system risks, this AC sets forth suggestions for establishing a comprehensive dangerous goods training program and manual, including a plan to prevent undeclared dangerous goods from entering the transportation system.

1.4 Where You Can Find This AC.

This AC may be accessed by FAA personnel and the public through the web link: http://www.faa.gov/regulations_policies/advisory_circulars/

1.5 Overview of Program and Regulatory Requirements

1.5.1 Standardized Terminology.

The terms "hazardous materials" and "dangerous goods" are synonyms. Although the majority of national regulations use the term "hazardous materials," most US certificate holders' operations are global, and subject to international regulations, in which the term "dangerous goods" is the standard terminology. In this AC, the term "dangerous goods" is used. However, the certificate holders can decide which terminology to use when submitting the manual and dangerous goods training program to the FAA. For the purposes of this AC, "regulatory requirements for dangerous goods" means the Hazardous Materials Regulations (HMR) and/or ICAO Technical Instructions, whichever provisions are more restrictive to the certificate holder's operation.

1.5.2 Program Overview.

The Hazardous Materials Safety Program (HMSP) has the primary responsibility for the oversight of dangerous goods transportation by air to, from, and within the United States (US), and US certificate holder operations globally. The HMSP designee, in conjunction with FAA Flight Standards Principal Operations Inspectors (POI), has the responsibility for analyzing the certificate holder's manual and dangerous goods training program in order to issue OpSpec. The OpSpec will indicate whether the certificate holder is authorized or prohibited from transporting dangerous goods. This process is facilitated by the technical review and recommendation by the HMSP designee. This AC is intended to support these mission responsibilities and to ensure all

individuals performing transport-related job functions on behalf of the certificate holder are fully aware of the certificate holder's duties and policies.

1.5.3 Regulatory Overview.

Regardless of whether the certificate holder operates under 14 CFR part 121 or part 135, and an authorization exists on its OpSpec, a manual and dangerous goods training program are required.

- Pursuant to 14 CFR § 119.49(a)(13), certificate holders are required to have OpSpec that authorize (Will Carry) or prohibit (Will Not Carry) to accept, handle, and transport dangerous goods on its aircraft;
- Title 14 CFR §§ 121.133(a), 125.73(o) and 135.21(a) require each certificate holder to prepare and keep current a manual for the use and guidance of flight, ground operations, and management personnel, in conducting its dangerous goods operations;
- The manual content for dangerous goods is specified in 14 CFR §§ 121.135(b)(25) and 135.23(p); and
- The dangerous goods training program is contained in 14 CFR part 121, subpart Z and part 135, subpart K.

1.5.4 Regulatory References.

Use of the applicable guidance and best practices contained within this AC constitutes one means of compliance with:

- Title 14 CFR, part 5 (Safety Management Systems – SMS – related to dangerous goods);
- Title 14 CFR, parts 60 to 139;
- Title 49 CFR, parts 171 to 180 (Hazardous Materials Regulations [HMR]);
- International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Aircraft;
- Order 8900.1, Flight Standards Information Management Systems;
- Interpretation, 63 Fed. Reg 30411, June 4, 1998; and
- Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals, AC 120-78A.

CHAPTER 2. DANGEROUS GOODS TRAINING PROGRAM

2.1 **Applicability.**

The dangerous goods training program is applicable to certificate holders operating in accordance with 14 CFR part 121 or part 135 that perform any of the following activities:

- Transport passengers and their baggage;
- Transport cargo or COMAT, with a prohibition on transporting dangerous goods aboard the aircraft ("Will Not Carry" certificate holder with no OpSpec A055 issue and prohibited under OpSpec A004 limitations); and
- Transport dangerous goods as cargo or COMAT aboard the aircraft ("Will Carry" certificate holder with OpSpec A055 issued and listed under OpSpec A004 authorizations).

2.2 **Training Requirement.**

Certificate holders are responsible for providing initial and recurrent dangerous goods training to each crewmember and person performing or directly supervising any transport-related job functions involving any item for transport on board an aircraft according to 14 CFR part 121, subpart Z and part 135, subpart K. Transport-related job functions include, but are not limited to, acceptance, rejection, handling, storage incidental to transport, packaging of company material, and loading.

2.3 **Dangerous Goods Training Program Required.**

Certificate holders are required to establish and implement a dangerous goods training program satisfying 14 CFR, part 121, Appendix O, at a minimum to:

- Ensure that each person performing or directly supervising any of the transport-related job functions is trained to comply with the regulatory requirements for dangerous goods;
- Enable the trained person to recognize items that contain, or may contain, dangerous goods regulated by the regulatory requirements for dangerous goods; and
- Enable the trained person to follow any certificate holder's specific policy, process, or operational procedure.

2.4 **FAA Approval.**

Regardless of the certificate holder's decision to use this AC or not, the dangerous goods training program requires the approval of the FAA prior to implementation or modification.

2.5 **Training Program Content.**

Certificate holders may use alternative approved approaches to develop and implement the dangerous goods training program.

2.5.1 Who to Train.

- Identify personnel who perform duties with any transport-related job function;
- Identify the level of responsibility of each worker (i.e., manager, supervisor, worker, contractor acting on behalf of the certificate holder);
- Identify who is responsible for identifying the personnel that need to be trained;
- Identify new hires and personnel who provide supervision during the interim period prior to the completion of training;
- Identify personnel whose transport-related job function is changing, and personnel who provide supervision during the interim period, prior to training being completed;
- Identify personnel who work for more than one certificate holder; and
- Identify repair stations regulated by the regulatory requirements for dangerous goods that perform work for or on the certificate holder's behalf.

2.5.2 Type of Dangerous Goods Training.

- Identify competencies and knowledge that need to be achieved, determine the most effective way of achieving them, and establish valid and reliable assessment tools to evaluate their achievement in order to produce a competent workforce;
- Provide training to personnel with responsibilities for any transport-related job function such as, but not limited to, processing, accepting, and handling of baggage, cargo, mail, or COMAT, prior to perform any of these functions;
- Identify the types of training required for each worker (specific dangerous goods training, or special process to perform the duties involving the covered function); and
- Identify who is responsible for determining the types of training each worker requires.

2.5.3 Timing of Dangerous Goods Training.

- Identify when initial training should begin, considering 14 CFR §§ 121.1005 and 135.505 as a minimum;
- Note when recurrent training should occur based on the initial training date;
- Determine who is responsible for ensuring the training is done in a timely manner; and
- Describe how the training is tracked.

2.5.4 Source of Dangerous Goods Training.

- Determine who provides the training (in-house, outsourced);
- Define the process for approving the training when it is provided by an entity other than the certificate holder; and
- Determine who decides how to conduct the training.

2.5.5 Evaluation of Dangerous Goods Training.

- Determine who oversees the training quality;
- Specify who determines instructor qualifications;
- Determine how training quality will continually be assessed; and
- Describe how demonstrated gaps in training will be handled.
    1. How these personnel will be tracked; and
    2. How these personnel will be supervised until training gaps are addressed.

2.5.6 Dangerous Goods Record Keeping Requirements.

- Identify who should be responsible for complying with record keeping requirements in 14 CFR §§ 121.1007 and 135.507;
- Identify who is responsible for storing and maintaining records database;
- Identify who is responsible for providing access to the training records when necessary; and
- Identify where records are kept.

CHAPTER 3. MANUAL

3.1 Applicability.

This chapter primarily contains general guidance for certificate holders to develop the dangerous goods procedures and information described in their manual to ensure that all applicable requirements of 14 CFR part 121 and part 135 are covered. Additional guidance related to the authorizations included in operations specification is described in sections 3.7 thru 3.9 of this chapter, regarding whether the certificate holder is authorized to:

- Transport passengers and their baggage;
- Transport cargo or COMAT, with a prohibition on transporting dangerous goods aboard the aircraft ("Will Not Carry" certificate holder with no OpSpec A055 issue and prohibited under OpSpec A004 limitations); and
- Transport dangerous goods as cargo or COMAT aboard the aircraft ("Will Carry" certificate holder with OpSpec A055 issued and listed under OpSpec A004 authorizations).

3.2 How to Apply the Content of this Chapter.

To aid the reader's understanding of this chapter, the certificate holder should use the table below as a tool to direct them to the applicable contents of this chapter relating to their authorization on OpSpec.

Table 1: Applicable Content.

If you are a certificate holder that operates under 14 CFR part 121 or part 135 and your OpSpec are:	the following sections of this chapter are applicable:
1. To transport passengers and their baggage[2]	3.3 to 3.7
2. Will Not Carry[1, 2]	3.3 to 3.6, and 3.8
3. Will Carry[1, 2]	3.3 to 3.6, and 3.9

Note 1: If a Will Not Carry or a Will Carry certificate holder transports passengers and their baggage, section 3.7 of this chapter is also applicable.

Note 2: Appendix A of this AC should also be considered when preparing the manual.

3.3 Manual Requirement.

Certificate holders are responsible for preparing and keeping current a manual containing procedures and information about dangerous goods to assist each crewmember and person performing, or directly supervising, any transport-related job function involving the transport of any item on board an aircraft in accordance with 14 CFR part 121, subpart G and part 135, subpart A. Transport-related job functions include, but are not limited to, acceptance, rejection, handling, storage incidental to transport, packaging of company material, and loading.

3.4 **Procedures and Information Required.**

Certificate holders are required to ensure the procedures and information contained in the manual are sufficient to assist personnel in identifying packages marked or labeled as containing dangerous goods, or show signs of containing undeclared dangerous goods, including:

- Procedures for rejecting packages that do not conform to the regulatory requirements for dangerous goods, or certificate holder's policies, where appropriate, or appear to contain undeclared dangerous goods;
- Procedures for reporting dangerous goods incidents, discrepancies and apparent violations as cargo, mail, COMAT, or carried by passengers, in accordance with §§ 171.15, 171.16 and 175.31 of the HMR, and under the certificate holder's Voluntary Disclosure Reporting Program, as appropriate, as a minimum; and
- Information regarding the certificate holder's dangerous goods policies, including whether the certificate holder is authorized to carry, or prohibited from carrying, dangerous goods.

3.5 **FAA Approval.**

The manual should clearly identify the person, with responsibility and authority for ensuring that the FAA is provided a copy of the manual, and for providing the FAA all updates. In accordance with the applicable operating certificate of the certificate holder, the manual requires the approval of the FAA prior to implementation.

3.6 **General Manual Content.**

Certificate holders may use alternative approved approaches to develop and implement the dangerous goods procedures and information described in their manual.

3.6.1 General Format.

The processes and procedures required for dangerous goods transport-related job functions are expected to be maintained in whole or in part in printed form, or other form acceptable to the FAA. The manual is required to be in a format which is easy to revise, and the content is clear and concise, with procedures to allow all concerned to perform their duties and responsibilities with a high degree of safety. The manual is required to comply with the Federal Regulations, 14 CFR part 121 or part 135, and cover all personnel responsible for transport related job functions.

3.6.2 Compatibility.

The manual should interface with all other manuals and not conflict with any other processes and procedures outlined in the certificate holder's system design.

3.6.3 Form and Signature.

The manual may be maintained in paper format or electronically. The AC entitled "Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals," AC 120-78A, provides additional guidance for electronic systems' use. The requirement to provide a manual is an integral part of the certificate holder's communication of its status as a "Will Carry" or "Will Not Carry" certificate holder and the processes and/or procedures adopted by the certificate holder.

3.6.4 Dangerous Goods Safety Analysis.

The processes and procedures contained in the manual are expected to be the result of an analysis on the part of the certificate holder, which demonstrates how the certificate holder will use its processes and procedures to ensure dangerous goods are properly and safely transported on board its aircraft, or rejected for transport.

- This analysis is part of the FAA baseline design analysis completed when reviewing the manual, prior to approval and issuing OpSpec. This analysis pertains to all processes and procedures regarding transport-related job functions.
- For certificate holders with an implemented SMS, the manual should contain a brief narrative of understanding that all processes, procedures, and operations regarding the transportation of dangerous goods are to be assessed under the certificate holder's SMS for safety risks within the system, and how those risks identified are to be mitigated to the lowest levels. The safety analysis is expected to cover all relevant transport-related job functions performed by the certificate holder, its contractors, subcontractors, or affiliates, acting on behalf of the certificate holder including, but not limited to: acceptance, rejection, loading, storage incidental to transport, packaging, and transport, of dangerous goods.
    1. Special considerations should be included for high-risk commodities such as lithium batteries and chemical oxygen generators;
    2. All process and procedural changes should to be analyzed by the certificate holder for accepting any increased safety risk; and
    3. The person accepting responsibility for identifying and/or mitigating the safety risk is expected to be identified in the analysis. This may be more than one person or business unit.

3.6.5 Safety Management System (SMS) as it Relates to Dangerous Goods.

Certificate holders with an approved and operational SMS are required to perform a safety risk analysis on their processes, and identify areas of risks and risk mitigation strategies, and continue to self-audit the design and performance elements of the system. The certificate holder should cover at a minimum the following items:

- Identify areas that involve a safety risk (i.e., acceptance, loading, securing, packaging [e.g., COMAT]);
- Identify any hazards that exist within the established processes;
- Evaluate the level of the hazard (acceptable, non-acceptable);
- Verify whether the safety risk can be mitigated for non-acceptable hazards;
    1. If yes, define mitigations necessary to eliminate or minimize the safety risk; and
    2. With the mitigations in place, verify whether the risk is now acceptable.
- Self-Audit the process/system over time to determine if the mitigation is effective, and whether additional safety risks exist.

Note: Certificate holders not required to implement a SMS should demonstrate that they are aware of the hazards within their system, and have mitigated those hazards to the greatest extent possible, to be able to operate safely.

3.6.6 Undeclared Dangerous Goods.

3.6.6.1 **Concept.**

An "undeclared" or "hidden" shipment is a shipment (mail, cargo or baggage) of dangerous goods not declared, intentionally or unintentionally, by the offeror to contain dangerous goods, and there is no attempt to comply with the regulatory requirements for dangerous goods. The certificate holder should exercise reasonable care to recognize readily apparent facts to reject any shipment of dangerous goods not in full compliance with the regulatory requirements for dangerous goods.

- The certificate holder knowingly violates the regulatory requirements for dangerous goods when they accept or transport dangerous goods without taking into account readily apparent facts indicating a package or baggage may contain dangerous goods which is not properly packaged, marked, labeled, or described on a shipping paper.
- It would not represent reasonable care to ignore readily apparent facts indicating either:
    1. A shipment declared to contain dangerous goods has readily apparent information indicating it is not properly packaged, marked, labeled, placarded, or described on a shipping paper; or
    2. A shipment contains a regulated dangerous good and is not properly marked, labeled, placarded, or described on a shipping paper, as containing the dangerous good.

3.6.6.2 **Process.**

Describe a plan to prevent packages or baggage containing undeclared dangerous goods from entering the air transportation system. The plan should include processes and procedures to:

- Prevent undeclared dangerous goods from being accepted, handled, loaded, and transported;
- Detect packages or baggage displaying readily apparent signs of containing undeclared dangerous goods, which may be included in the review of marks, labels, documentation, and any other readily apparent information;
- Prevent recurrences when a package or baggage containing undeclared dangerous goods is detected (evaluate internal process and contact shippers/offerors/passenger), including using the reporting process;
- Develop a preventive and continuous communication process to provide shippers/offerors/passenger information to understand the risk of undeclared dangerous goods in the transport system;
- Identify the personnel responsible for this function; and
- Describe how personnel should proceed when a package or an item contained in baggage does not comply with the regulatory requirements of dangerous goods or the certificate holder's restrictions.

3.6.6.3 **Automated Process.**

Develop a plan to prevent packages or baggage containing undeclared dangerous goods from entering the air transportation system when that process does not require human intervention. The plan should include processes and procedures to:

- Identify the transport-related job functions replaced by mechanical/automated process;
- Develop process and procedures to prevent undeclared dangerous goods in the transport-related job functions replaced by mechanical/automated process;
- Detect packages displaying signs of containing undeclared dangerous goods, to include the review of marks, labels, and documentation, and any other readily apparent information;
- Develop process to prevent recurrences when a package containing undeclared dangerous goods is detected (evaluate internal process and contact shippers/offerors), including using the reporting process;
- Develop a preventive and continuous communication process to provide shippers/offerors/passengers information to understand the risk of undeclared dangerous goods in the transport system; and

- Identify when a package or baggage does not comply with the regulatory requirements for dangerous goods.

3.6.6.4 **Evaluation.**

Describe the evaluation process performed, considering all sources of information and collected data, including:

- Self-audit processes and procedures in order to verify their effectiveness;
- Identify and analyze recurrences; and
- Analyze possible safety impacts when a process is intended to be modified.

Note: Appendix A of this AC provides information for preventing undeclared dangerous goods.

3.6.7 Dangerous Goods Manual Management and Interfaces.

The certificate holder is responsible for addressing safety risk management in the document control process, including responsibility, authority, distribution, accountability, and availability.

3.6.7.1 **Responsibility/Authority.**

Refer to other documents that identify or clearly delineate the accountable executive, by title or job description, who is responsible for the manual, and all management personnel with the authority to act on behalf of the accountable executive.

3.6.7.2 **Revisions.**

Define the title or job description of the person responsible for revising and maintaining the manual.

- Develop procedures to ensure that only authorized personnel revise the manual;
- Identify who, by title or job description, will be authorized to make revisions, and how that person is authorized to do so;
- Explain how the certificate holder ensures that the manual is current;
- Describe the process for making revisions; and
- Explain how the revisions are identified, distributed, and promoted, throughout the certificate holder's transportation system.

3.6.7.3 **Distribution, Availability/Publication.**

Identify the process that verifies the manual is distributed to all remote station users/dangerous goods personnel (including contract personnel

acting on behalf of the certificate holder) who need it to perform their duties. Include in this process measures to ensure version control.

- Identify the title or job description of the person responsible for distribution and version control of the documents; and
- Document the current version in a master library and shop/office libraries located in the facility.

3.6.7.4 **Manual Management.**

Describe a procedure to ensure that only authorized dangerous goods documents are available:

- Identify who will be responsible, by title or job description, for ensuring the FAA is informed and provided the revised manual;
- Define the process to ensure that dangerous goods documents of external origin are identified and controlled;
- Describe procedures to prevent the use of obsolete dangerous goods documents; and
- Indicate the procedures needed to address system security to prevent inadvertent changes to the software manual.

3.7 Manual for Certificate Holders Authorized to Transport Passengers and Their Baggage

3.7.1 Passenger and Baggage Provisions.

In addition to the content described in sections 3.3, 3.4, 3.5, and 3.6, of this chapter, the manual of a certificate holder authorized to transport passengers and their baggage in its OpSpec is required to contain procedures and information to ensure that:

- Dangerous Goods Passenger Notification System is implemented, at a minimum, in compliance with § 175.25 of the HMR, or the related ICAO Technical Instructions provisions, when applicable;
- Baggage containing dangerous goods are properly accepted, rejected, and handled, at a minimum, in compliance with § 175.10 of the HMR, or the related ICAO Technical Instructions provisions, when applicable; and
- Undeclared dangerous goods in baggage are identified and rejected.

3.7.2 Additional Provisions.

The certificate holder authorized to transport passengers and their baggage is also expected to follow the provisions described in section 3.8 of this chapter, if it is a “Will Not Carry” certificate holder, or section 3.9, if it is a “Will Carry” certificate holder according to **Table 1**.

3.7.3 Points of Entry.

Identify each point of entry for baggage into the certificate holder's transport system.

- Identify locations that are responsible for acceptance of baggage, at a corporate level.

3.7.4 Personnel.

Identify who is responsible for overseeing the acceptance/rejection intake points.

- Identify the management personnel responsible for overseeing acceptance/rejection for each point of baggage acceptance; and
- Identify the responsible worker personnel, including any contractors, subcontractors, or affiliates acting on behalf of the certificate holder.

3.7.5 Passenger Notification.

Identify the process for complying with dangerous goods passenger notification system.

- Describe how passengers are made aware of the types of dangerous goods permitted in transport on an aircraft; and
- Describe acceptable passenger notification methods considering the following five scenarios.
    1. Where tickets are issued;
    2. Where boarding passes are issued;
    3. Where passenger baggage is dropped off;
    4. At aircraft boarding areas; and
    5. Any other location where passengers are issued boarding passes and/or checked baggage is accepted.

Note: Appendix A of this AC provides information for preventing undeclared dangerous goods, including a guide for implementing a dangerous goods passenger notification system.

3.7.6 Baggage Acceptance Process.

Identify the process for intake of baggage.

- Identify the process for determining dangerous goods compliance at each point of baggage acceptance; and
- Describe the process for providing approval to a passenger for the carriage of baggage containing dangerous goods when certificate holder approval is required by § 175.10 of the HMR, or the related ICAO Technical Instructions provisions, when applicable.

3.7.7 Baggage Handling.

Include special handling requirements that may be necessary for baggage containing dangerous goods.

3.7.8 Rejecting Baggage.

Describe procedures for rejecting dangerous goods in baggage not conforming to the exceptions of § 175.10 of the HMR, or the related ICAO Technical Instructions provisions, when applicable, or which appear to contain prohibited dangerous goods.

- Describe how the baggage containing forbidden dangerous goods is separated from other baggage continuing in transport;
- Describe what happens to the dangerous goods in baggage once it is rejected;
- Describe when and how the passenger is notified; and
- Specify the process for returning the baggage to the passenger, or other procedure to ensure the dangerous goods in baggage will not be transported by an aircraft.

3.7.9 Discrepancies Reporting.

Identify the process for reporting baggage containing dangerous goods that are damaged or found to be leaking, containing undeclared dangerous goods, or that are otherwise determined to be non-compliant.

- Specify the person, by title or job description, responsible for the report;
- Specify how the report is made (electronic, paper form);
- Describe what happens to the baggage once it is rejected, or detected as containing undeclared dangerous goods;
- Describe how the baggage subject to discrepancy reporting is separated from other baggage continuing in air transport, and
- Specify when and how the passenger is notified.

3.8 Manual for Will Not Carry Certificate Holders

3.8.1 Will Not Carry Definition.

"Will Not Carry" means that the certificate holder is prohibited from transporting dangerous goods in its OpSpec. Based on that, the certificate holder is permitted to transport cargo or COMAT that does not contain dangerous goods, with a general prohibition on transporting dangerous goods aboard the aircraft.

3.8.2 Will Not Carry Provisions.

In addition to the content described in sections 3.3, 3.4, 3.5, and 3.6, of this chapter, the manual of a Will Not Carry certificate holder is expected to contain procedures and information to ensure that:

- Packages containing declared and undeclared dangerous goods are rejected;
- Packages containing dangerous goods are not accepted, handled, stored, packaged, loaded, or carried on board an aircraft; and

- COMAT containing dangerous goods (i.e., aircraft replacement parts, lithium batteries, chemical oxygen generators, consumable materials or other items regulated by the regulatory requirements for dangerous goods) are properly prepared and offered to other authorized certificate holders for transport.

3.8.3 Additional Provisions.

The Will Not Carry certificate holder authorized to transport passengers and their baggage in its OpSpec is also expected to follow the provisions described in section 3.7 of this chapter according to **Table 1**.

3.8.4 Corporate Overview.

Include a corporate overview of certificate holder's operations, especially as it relates to prohibitions on dangerous goods.

- Define the scope of operations for the certificate holder.
    1. Refer to other documents, where identified, or identify certificate holder's routes, if possible;
    2. Identify corporate policy on the prohibition for acceptance and transport of dangerous goods; and
    3. Identify whether the certificate holder is scheduled or unscheduled.
- Describe the Safety Risk Management structure of the certificate holder.
    1. Refer to other documents, where identified, or identify the corporate chain of authority for safety management, include those responsible for budget and workforce decisions;
    2. Identify all management personnel, by title or job description, who perform risk acceptance functions within the certificate holder's system; and
    3. Identify whether certificate holder has an operating Safety Management System, and how many years SMS has been operational.
- Describe the corporate structure for special policy, information, and communication, identifying, by title or job description, the management personnel responsible for items such as, but not limited to, the following:
    1. Safety Alert for Operators (SAFO);
    2. FAA Notices applicable to certificate holders;
    3. Information for Operators (InFO);
    4. Advisory Circulars;
    5. Reporting Procedures; and
    6. Emergency Orders.

3.8.5 Certificate Holder's Process for Rejection of Dangerous Goods.

3.8.5.1 **Points of Entry.**

Identify the points of entry for packages into the certificate holder's transport system.

- Identify each location responsible for "acceptance" of cargo.

3.8.5.2 **Personnel.**

Identify who is in charge of overseeing the acceptance/rejection intake points.

- For each point of cargo acceptance, identify the management personnel responsible for overseeing acceptance/rejection; and
- Worker personnel, including any contractors, subcontractors or affiliates acting on behalf of the certificate holder.

3.8.5.3 **Certificate Holder's Process.**

From points of cargo acceptance, identify the process for intake of cargo and the process for rejecting dangerous goods. If the same process is not used in all acceptance, describe the process. The process should cover at a minimum the following items:

- Identify signage required by the regulatory requirements for dangerous goods;
- Verify there are no indications on documentation that declared dangerous goods are present (e.g., shipping documentation, shipper's certifications, UN numbers, proper shipping name, limited quantity markings, etc.);
- Observe any packaging bearing dangerous goods markings or labels is rejected;
- Verify packaging does not contain markings or indications of declared dangerous goods or indicate the presence of undeclared dangerous goods; and
- Verify whether there are any special considerations for the package:
    1. Verify if the material is excepted from the regulatory requirements for dangerous goods; and
    2. Verify if the package contains lithium batteries or equipment containing lithium batteries. If it does, ensure that it is rejected.

3.8.5.4 **Rejecting Packages.**

Describe the process for rejecting dangerous goods as cargo.

- Identify factors used to determine the presence of a compliant, non-compliant, or hidden shipment of, dangerous goods;

- Provide the process for separating rejected packages from those that will be transported on an aircraft;
- Identify the person who is responsible for rejected packages;
- Specify the process for returning rejected packages to the shipper/offeror or otherwise disposing of the packages; and
- Describe the process to notify the shipper/offeror that dangerous goods shipments have been rejected.

3.8.6 Special Considerations for COMAT.

Will Not Carry certificate holders are expected to establish a process for preparing COMAT containing dangerous goods and offering those shipments to a certificate holder authorized to carry dangerous goods. At a minimum, the process should:

- Identify the persons responsible for classifying, packaging, labeling, marking, completing the shipping paper, and offering the shipment for transport;
- Identify the person responsible for the oversight of the individuals preparing the COMAT containing dangerous goods for transport;
- Identify the process for evaluating all dangerous goods within the certificate holder's inventory, including shipments of lithium batteries and chemical oxygen generator;
- Identify where COMAT is prepared for shipping; and
- Describe a procedure to prevent the inadvertent shipment of COMAT containing dangerous goods being offered in the cargo transport system.

3.8.7 Special Consideration for Interlining.

Describe the procedures to ensure that dangerous goods will not be transferred from other certificate holder.

3.8.8 Released Information by the FAA.

Evaluate whether all information in applicable dangerous goods SAFOs and Notices published by the FAA was considered, and where this record is.

3.8.9 Repair Stations Notification

Describe the process to notify in writing each repair station under the regulatory requirements for dangerous goods that perform work for, or on the certificate holder's behalf, regarding certificate holder's policies and the information about the prohibition to transport dangerous goods, including COMAT, according to the OpSpec as a Will Not Carry certificate holder.

3.8.10 Handling Dangerous Goods.

3.8.10.1 **Process.**

Identify the handling process for rejected shipments, including the key points for rejection at the acceptance point, the loading ramp, or storage incidental to transport.

3.8.10.2 **Personnel.**

Identify the following personnel, duties, and information:

- The person responsible for oversight of the handling functions;
- The person responsible for performing the handling job function;
- The job duties of the persons performing the handling job function;
- The job duties related to moving items from the acceptance point to either storage incidental to transport or the loading dock; and
- The specific rejection requirements used to evaluate packages containing dangerous goods.

3.8.11 Storage Incidental to Transport.

3.8.11.1 **Process.**

Identify the location where items are placed in the certificate holder's facility when entering "storage incidental to transport".

- Specify how rejected items are stored, including segregation or isolation procedures, to keep potentially reactive items separate; and
- Describe how certificate holder tracks rejected items within its facility.

3.8.11.2 **Personnel.**

Identify the person responsible for this function within the certificate holder's facility.

3.8.12 Loading.

3.8.12.1 **Personnel.**

For each loading area, the certificate holder should identify the following:

- Management personnel responsible for overseeing loading; and
- Worker personnel, including any contractors, subcontractors, or affiliates acting on behalf of the certificate holder.

3.8.12.2 **Process.**

For each loading area, identify the process for preparing the shipments prior to loading and the actual loading onto the aircraft. The process should:

- Identify the responsible managers by loading location;

- Identify personnel, contractors, subcontractors, and affiliates acting on behalf of the certificate holder performing this function by job description;
- Describe the process of rejecting dangerous goods packages prior to loading onto the aircraft (i.e., use of unit load devices, palletizing shipments, etc.); and
- Describe the roles the ramp personnel have in rejecting dangerous goods, specifying who makes decisions regarding when dangerous goods packages are rejected prior to loading onto the aircraft.

3.8.13 Incident and Discrepancy Reporting.

Identify the process for reporting packages determined to contain dangerous goods (declared or undeclared).

- Specify the person, by title or job description, responsible for the report;
- Specify how the report is made (electronic, paper form);
- Describe how the package is separated from other packages continuing in air transport;
- Describe what happens to the package once it is rejected;
- Specify when and how the shipper/offeror is notified; and
- Describe any follow-up actions taken with the shipper or analysis of reports.

3.9 **Manual for Will Carry Certificate Holders.**

3.9.1 Will Carry Definition.

"Will Carry" means that the certificate holder has authorization to transport dangerous goods in its OpSpec. Based on that, the certificate holder is permitted to transport cargo or COMAT containing dangerous goods aboard the aircraft.

3.9.2 Will Carry Provisions.

In addition to the content described in sections 3.3, 3.4, 3.5, and 3.6, of this chapter, the manual of a Will Carry certificate holder is expected to contain procedures and information to ensure:

- Packages containing dangerous goods are properly offered and accepted in compliance with the regulatory requirements for dangerous goods;
- Packages containing dangerous goods are properly handled, stored, packaged, loaded, or carried on board an aircraft in compliance with the regulatory requirements for dangerous goods; and
- COMAT containing dangerous goods (i.e., aircraft replacement parts, lithium batteries, chemical oxygen generators, consumable materials, or other items

regulated by the regulatory requirements for dangerous goods) are properly handled, packaged, and transported.

3.9.3 Additional Provisions.

The Will Carry certificate holder authorized to transport passengers and their baggage in its OpSpec is also expected to follow the provisions described on section 3.7 of this chapter in accordance with **Table 1**.

3.9.4 Corporate Overview.

Include a corporate overview of certificate holder's operations, especially as it relates to dangerous goods transport and any limitations.

- Define the scope of operations for the certificate holder;
    1. Refer to other documents, where identified, or identify certificate holder's routes, if possible;
    2. Identify the locations where the certificate holder accepts dangerous goods, if limited;
    3. Identify types of dangerous goods transported, if limited; and
    4. Identify whether the certificate holder is scheduled or unscheduled.
- Describe the Safety Risk Management structure of the certificate holder.
    1. Refer to other documents, where identified, or identify the corporate chain of authority for safety management, include those responsible for budget and workforce decisions;
    2. Identify all management personnel, by title or job description, who perform risk acceptance functions within the certificate holder's system; and
    3. Identify whether certificate holder has an operating Safety Management System, and how many years SMS has been operational.
- Describe the corporate structure for special policy, information, and communication identifying, by title or job description, the management personnel responsible for items such as, but not limited to, the following:
    1. Safety Alert for Operators (SAFO);
    2. FAA Notices applicable to Certificate Holders;
    3. Information for Operators (InFO);
    4. Advisory Circulars;
    5. Reporting Procedures; and
    6. Emergency Orders.

3.9.5 Certificate Holder's Process for Acceptance/Rejection.

3.9.5.1 **Points of Entry.**

Identify the points of entry for packages into the certificate holder's transport system.

- Identify each location responsible for acceptance of cargo.

3.9.5.2 **Personnel.**

Identify who is in charge of overseeing the acceptance/rejection intake points.

- For each point of cargo acceptance, identify the management personnel responsible for overseeing acceptance/rejection; and
- Worker personnel, including any contractors, subcontractors or affiliates acting on behalf of the certificate holder.

3.9.5.3 **Certificate Holder's Process.**

From the point of cargo acceptance, identify the process for intake of cargo, and the process for determining dangerous goods compliance and identification. The process should cover at a minimum the following items:

3.9.5.3.1 Signage.

Identify signage required by the regulatory requirements for dangerous goods.

3.9.5.3.2 Documentation.

Verify the material's shipping documentation and shipper's certification are consistent with the hazard communications on the packaging (e.g., marking and labeling).

3.9.5.3.3 Marking/Labeling.

Verify packaging is marked and labeled appropriately for the material identified on the shipping paper.

3.9.5.3.4 Packaging.

Verify packaging is authorized, is not damaged, appears appropriate for the quantity of material shipped, and is not leaking.

3.9.5.3.5 Quantity.

Ensure that the total quantity indicated on the shipping documentation is within the quantity limitations authorized by the regulatory requirements for dangerous goods.

3.9.5.3.6 Special Considerations.

Verify if there are any special considerations for the package:

- Verify if the material is authorized for transport on passenger aircraft, or is required to be transported on cargo aircraft only;
- Verify if there are special labeling requirements for cargo-aircraft only shipments;
- Determine if the material is offered under a Special Permit (SP) or Competent Authority (CA) approval;
    1. If yes, review the terms of the SP or CA, and ensure that the package is offered consistent with those terms; and
    2. Verify that the certificate holder has been granted the authorization to transport the shipment.
- Determine if the material is a chemical oxygen generator or contains lithium batteries. If it does, ensure it is offered consistent with the regulations; and
- Consider any readily available information to determine compliance.

3.9.5.4 **Non-compliant Packages.**

Describe the process for rejecting dangerous goods as cargo deemed to be non-compliant with the regulatory requirements for dangerous goods.

- Identify factors used to determine the presence of a non-compliant or hidden shipment of dangerous goods;
- Specify procedures if the non-compliant package is discovered after acceptance;
- Provide the process for separating non-compliant packages from those that will be transported on an aircraft;
- Identify the person who is notified of a non-compliant package;
- Specify the process for returning non-compliant packages to the shipper/offeror or otherwise disposing of the packages; and
- Describe the process to notify the shipper/offeror that dangerous goods shipments have been rejected.

3.9.6 Special Considerations for COMAT.

Will Carry certificate holders are expected to establish a process for preparing and handling COMAT containing dangerous goods for shipment on board its aircraft. At a minimum, the process should:

- Identify the persons responsible for classifying, packaging, labeling, marking, completing the shipping paper, and offering the shipment for transport;
- Identify the person responsible for the oversight of the individuals preparing the COMAT containing dangerous goods for transport;
- Identify where COMAT is prepared;

- Describe how COMAT enters the transportation system; and
- Identify who verifies whether COMAT is prepared correctly.

3.9.7 Special Considerations for Interlining.

Describe the procedures to ensure that dangerous goods transferred from other certificate holder are in compliance with the permeation on OpSpec.

3.9.8 Repair Stations Notification

Describe the process to notify in writing each repair station under the regulatory requirements for dangerous goods that perform work for, or on the certificate holder's behalf, regarding certificate holder's policies and the information about the permission to transport dangerous goods, according to the OpSpec as a Will Carry certificate holder.

3.9.9 Special Consideration for Lithium Batteries.

- Verify whether the Safety Risk Analysis has been completed;
    1. Describe the process used for conducting the analysis;
    2. Indicate if the analysis shows that lithium batteries can be safely transported;
    3. If an analysis has not been completed, describe the process for rejecting lithium batteries.
- Identify process for determining the type of lithium battery being offered for transportation;
- Describe how the batteries that are forbidden on passenger aircraft are handled;
- Describe the mitigation measures applied during transport (such as ULD with fire suppression system, protective cover, etc.);
- Identify any other dangerous goods are loaded with lithium batteries; and
- Indicate whether lithium batteries are consolidated in a single location on the aircraft.

3.9.10 Special Consideration for Chemical Oxygen Generators.

Describe the process for shipping chemical oxygen generators, and how they are loaded into the aircraft.

3.9.11 Cargo Aircraft Only Package.

Describe the procedure to prevent the inadvertent shipment of items forbidden for transport on passenger aircraft.

3.9.12 Released Information by the FAA.

Evaluate whether all information in the applicable dangerous goods SAFOs and Notices published by the FAA was considered, and where this record is.

3.9.13 Handling Dangerous Goods.

3.9.13.1 **Process.**

Identify the handling process, including the description of the movement from the acceptance point, to the loading ramp, or storage incidental to transport.

3.9.13.2 **Personnel.**

Identify the following personnel, duties, and information:

- The persons responsible for oversight of the handling function;
- The persons responsible for performing the handling job function;
- The job duties of the persons performing the handling job function;
- The job duties related to moving items from the acceptance point to either storage incidental to transport or the loading dock; and
- The special handling requirements necessary for packages containing dangerous goods.

3.9.14 Storage Incidental to Transport

3.9.14.1 **Process.**

Identify the location where items are placed in the certificate holder's facility when entering "storage incidental to transport".

- Specify how items are stored, including segregation or isolation procedures, to keep potentially reactive items separate;
- Describe the process for moving items into or out of "storage incidental to transport"; and
- Describe how certificate holder tracks items within their facility that are in "storage incidental to transport".

3.9.14.2 **Personnel.**

Identify the person responsible for this function within the certificate holder's facility.

3.9.15 Loading

3.9.15.1 **Personnel.**

For each loading area, certificate holder should identify the following:

- Management personnel responsible for overseeing loading; and
- Worker personnel, including any contractors, subcontractors, or affiliates acting on behalf of the certificate holder.

3.9.15.2 **Process.**

For each loading area, identify the process for preparing the shipments prior to loading, and the actual loading onto the aircraft. The process should:

- Identify the responsible managers by loading location;
- Identify personnel, contractors, subcontractors, and affiliates acting on behalf of the certificate holder, performing this function by job description;
- Describe the process of preparing and consolidating the dangerous goods packages prior to loading onto the aircraft (i.e., use of unit load devices, palletizing shipments, etc.); and
- Describe the roles the ramp personnel have in verifying that the dangerous goods package is offered in compliance with the regulatory requirements for dangerous goods, to include:
    1. Who makes decisions regarding where dangerous goods packages are placed in the aircraft (i.e., types of cargo compartments, location within compartments);
    2. The process for verifying whether the loading process is consistent with the regulatory requirements for dangerous goods;
    3. How dangerous goods packages are separated for loading into the different cargo compartments;
    4. How cargo compartment quantity limitations are followed (e.g., under § 175.75 of the HMR);
    5. The process for verifying that cargo is appropriately segregated on the loading ramp to prevent inadvertent shipment of cargo identified as non-compliant;
    6. Who is responsible for ensuring that stowage limitations of §§ 175.78 and 175.501of the HMR, or the related ICAO Technical Instructions provisions, when applicable, are satisfied; and
    7. How loading personnel are made aware any other risk mitigation strategies for dangerous goods.

3.9.16 Shipping Paper and Notification to Pilot in Command (NOPIC or NOTOC)

3.9.16.1 **Personnel.**

Identify the person responsible for compliance with the NOPIC requirements of §175.33 of the HMR, or the related ICAO Technical Instructions provisions, when applicable.

3.9.16.2 **Process.**

Identify the process for complying with §175.33 of the HMR or the related ICAO Technical Instructions provisions, when applicable.

- Specify where (by location) the shipping paper information is stored;
- Describe the process for notifying the pilot in command; and
- Describe the process used to make NOPIC information available at the intended airport of arrival, and make available to authorized government officials.

3.9.17 Incident and Discrepancy Reporting.

Identify the process for reporting dangerous goods packages damaged or found to be leaking, undeclared dangerous goods, or packages that are otherwise determined to be non-compliant.

- Specify the person, by title or job description, responsible for the report;
- Specify how the report is made (electronic, paper form);
- Describe how the package is separated from other packages continuing in air transport;
- Describe what happens to the package once it is rejected;
- Specify when and how the shipper/offeror is notified; and
- Describe any follow-up actions taken with the shipper or analysis of reports.

APPENDIX A. PREVENTING UNDECLARED DANGEROUS GOODS

A.1 General Information.

The risk of undeclared or improperly prepared dangerous goods shipments in air transportation has been demonstrated through experience such as the loss of ValuJet flight 592 in 1996. In addition, many incidents of fire and the dangerous evolution of heat in both the cargo hold and cabin have been reported. While these incidents have been managed and mitigated to date, we must continue to work to ensure that the risks of future incidents are being reduced to the greatest extent possible. This work will further decrease the likelihood of a catastrophic event to the aircraft. The information in this AC is intended for use by certificate holders when implementing a plan for preventing and reacting to undeclared (noncompliant) dangerous goods shipments presenting an unknown risk when being transported as cargo or in a passenger's checked or carry-on baggage. The information consists of regulatory and recommended risk controls and include, but are not limited to, communication, education, training, feedback, and collaboration, to prevent the noncompliant shipments from entering the air transportation system. Prevention is and should be the goal of everyone involved in the air transport system. The success of controlling this risk should include not only the certificate holder, but also collaboration and coordination with every entity in the supply chain. Evolving technologies are making it easier to leverage a variety of media sources to provide information, which can be a more effective means to communicate, improve business practices, and to ultimately prevent undeclared dangerous goods shipments from being transported by certificate holders. Moreover, being proactive and providing resources to prevent the likelihood of undeclared dangerous goods may reduce the certificate holder's costs and the amount of resources needed to identify, handle, and report, undeclared shipments after entering the air transportation system, including disposal or the return of the shipment to the offeror.

A.2 Communication and Notification.

One of the key tools for use by certificate holders, when implementing preventive processes and procedures to control the offering of undeclared dangerous goods, is communication. Cargo shippers and passengers are the most significant control for preventing undeclared dangerous goods from being transported on an aircraft. As cargo shippers offer shipments carried in cargo holds onboard both cargo and passenger aircraft, the origination of the risk is broad based. The undeclared shipment can be brought into the cabin in carry-on baggage and checked baggage in the cargo hold, or offered and transported as cargo. To account for evolving technologies and/or certificate holder-specific conditions supporting an effective notification to cargo shippers and passengers, the dangerous goods permitted, and recognized items that are not permitted, should consistently be provided to all involved. Most cargo shippers and passengers do not intentionally introduce risk into the air transportation system. They are not aware of the risk they are posing to themselves or others. There are deliberate actions, but those are less frequent and potentially criminal. The FAA continues to support and collaborate with the aviation industry on actions to involve all entities in the

transportation of dangerous goods by air in programs to better communicate the hazards of dangerous goods.

A.3 **Proactive Actions to Prevent Undeclared Shipments.**

Communication and notification methods for informing cargo shippers and passengers share a common outcome -- informing the originator of the dangerous goods restrictions. Therefore, in accordance with the certificate holder's communication system, the most appropriate communication method necessary to implement and effectively deliver information to reduce or eliminate undeclared shipments will largely be dependent on the communication system the cargo shipper or passenger chooses to use.

A.3.1 Transporting Cargo.

For cargo shippers and those involved in the air transport system prior to the certificate holder accepting possession, the following processes may assist in prevention:

- Developing continuous communication with customers that are potential dangerous goods shippers (e.g., electronic device shippers, postal service) can serve as an effective means of preventing undeclared shipments from entering the air transportation system. This communication could direct customers to guidance and information on common undeclared dangerous goods and provide proper shipping practices:
    1. Push Communication – Providing dangerous goods information directly to the cargo shippers; and
    2. Pull Communication – Providing dangerous goods information on the certificate holder's website, including brochures, videos, hotline number, etc., and directing the cargo shippers to that location.
- Processes that may be implemented by certificate holders:
    1. Providing information or methods to find information on identifying dangerous goods in the business relationship (i.e., sales and marketing) with customers;
    2. Informing customers about dangerous goods training requirements for shippers and others in the transport chain that may engage in functions related to dangerous goods transportation;
    3. Providing procedures and information to educate shippers at cargo facilities is critical for reducing the occurrence of undeclared dangerous goods entering the air transportation system. This and other preventive measures are especially critical when the certificate holder's cargo systems are automated, and do not use employees to recognize indications that the package should be rejected, as well as to implement reactive actions;

4. Promoting possible incentives to shippers if they do not include undeclared dangerous goods in their shipments; and
5. Implementing any other means available to prevent or reduce the introduction of undeclared dangerous goods in the air transport system from the source.

A.3.2 Transporting Passengers.

For certificate holders that transport passengers and their baggage, the dangerous goods restrictions are required to be included in a passenger notification system. The intent here is to clearly communicate with passengers and prevent dangerous goods from being carried on the aircraft. Specifically, certificate holders are responsible for designing and implementing processes and procedures, as well as a passenger notification system to communicate to passengers, that dangerous goods are forbidden in carry-on or checked baggage. Key to the success of the notification process is the ability of certificate holders to reach passengers early and often; prior to transporting their carry-on or checked baggage. In addition, the notification system should provide flexibility to address changing circumstances, conditions and environments even if those changes are temporary.

- The passenger notification system includes a process for an acknowledgement by the passenger, or someone acting on their behalf, that he or she has been presented with the information about dangerous goods that are forbidden as carry-on or checked baggage, or conversely that he or she has been presented with the information about dangerous goods that are permitted as carry-on or checked baggage. Acknowledgement is required at:
    1. The point of ticket purchase, or if not practical, made available in another manner to passengers prior to issuing a boarding pass; and
    2. The time the boarding pass is issued, or when no boarding pass is issued, prior to boarding the aircraft.
- The information provided to passengers about dangerous goods forbidden or permitted to be carried aboard an aircraft are required to be presented at each location where the following processes take place:
    1. Tickets are issued;
    2. Boarding passes are issued;
    3. Passenger baggage is dropped off;
    4. Aircraft boarding areas; and
    5. Any other location where passengers are issued boarding passes and/or checked baggage is accepted.
- In order to accommodate passengers who may not speak the national language, and to ensure that the information is communicated effectively, visual examples would substitute or supplement any text.

A.3.3 Message Delivery.

For both cargo shippers and passengers, the messaging content and method of delivery should be appropriate for the location. For example, local operating characteristics should be taken into consideration and technology should be widely considered to support effectiveness and efficiency of message delivery.

- Appropriate information should be included, such as:
    1. Information required by regulation;
    2. Commonly confiscated/rejected items from specific locations or globally;
    3. Information gathered from previous incidents or reports;
    4. Regional or seasonal operating characteristics; and
    5. Other regionally or globally known information.
- Examples of methods of delivery to communicate information:
    1. Electronic displays;
    2. Websites;
    3. Verbal discussions;
    4. Applications on smartphones;
    5. Kiosks;
    6. Printed matter;
    7. Personal contact;
    8. Announcements; and
    9. Letters and information attached to general business correspondence or regular general communication.
- Technology should continually be reviewed for improved processes to communicate information. As new technologies, such as self-check-in or electronic shipping papers, are developed or incorporated into the certificate holder's processes, the manual should be updated to reflect those changes.

A.3.4 Incentives for Safety.

An effective plan to mitigate the risk of undeclared dangerous goods offered for transportation by air from shippers or passengers should result in an increased level of safety. Promoting educational information on the prevention of undeclared dangerous goods to certificate holder's customers should focus the information on the highest-risk group known. For certificate holders with cargo shippers and passengers, the plan should include appropriate interaction between all parties to inform them about the risks inherent to the air transportation of undeclared dangerous goods. The plan should also be flexible to recognize and accommodate any other means that might be available to cargo shippers and passengers to prevent or reduce the introduction of undeclared

dangerous goods in the transport system, as doing so, will also contribute to reducing the level a risk.

A.4 **Reactive Actions to Prevent Undeclared Shipments.**

A.4.1 Legal Requirement.

In accordance with 14 CFR part 121, subpart G and part 135, subpart A, each certificate holder must ensure that the procedures and information described in its manual are sufficient to assist each person performing or directly supervising the acceptance, rejection, handling, storage, packaging, and loading, of items for transport onboard an aircraft in identifying and rejecting packages and baggage that show signs of containing undeclared dangerous goods.

A.4.2 Identifying.

A.4.2.1 **Transporting Cargo.**

Procedures and training for personnel to recognize signs of undeclared or noncompliant dangerous goods shipments in general cargo should include, but is not limited to, the following information:

- Hazard labels or markings on a package that may indicate the presence of dangerous goods;
- Packaging characteristics, such as metal or plastic drums, that generally are used for dangerous goods transport;
- Packages that, when handled, provide indications that a dangerous good may be inside;
- Documents, when provided, that indicate that there may be a dangerous good being offered; and
- Other available information in the certificate holders' systems.

A.4.2.2 **Transporting Passenger.**

When passenger's carry-on and checked baggage are being processed for air transportation, procedures and training for personnel to recognize signs of an undeclared or noncompliant baggage should include, but are not limited to, the following information:

- Hazard labels or marking on the outside of a box that may indicate the presence of dangerous goods;
- Suspicious baggage or boxes that may contain dangerous goods;
- Questions that passenger asks regarding possible prohibited items; and

- Providing adequate communication to the passenger for them to identify a prohibited item.

A.4.3 Rejecting.

Certificate holders are required to reject packages or baggage that show signs of containing undeclared dangerous goods.

A.4.3.1 **Transporting Cargo.**

Procedures for rejecting cargo shipments should include, but are not limited to:

- How the shipment is removed from the cargo stream;
- How the shipment is returned, disposed of, or stored;
- How record keeping of rejected shipments is implemented; and
- How the originator and others in the transport system are notified of a non-compliant shipment.

A.4.3.2 **Transporting Passenger.**

Procedures for rejecting dangerous goods in passenger baggage should include, but are not limited to:

- How the dangerous goods are removed from baggage, if prior to screening during check in;
- How to coordinate with security screening personnel to handle prohibited items found in screening;
- How the method of returning, disposing, or storing these items is determined;
- How record keeping of rejected shipments is implemented; and
- How the originator and others involved are notified.

A.4.4 Notifying.

Where the barriers to prevent undeclared dangerous goods entering the air transportation system fail, the certificate holder is required to notify the FAA when packages or baggage are found to contain undeclared dangerous goods, subsequent to their being offered and accepted for transportation. The procedures to notify and provide information to support oversight activities are essential to reducing the risk of future undeclared shipments. These procedures are part of the aviation safety system, as they provide the FAA information to evaluate compliance of others in the transport chain, and continually conduct safety trend analysis. This collaboration is a significant mitigation for risk management in aviation safety.

A.4.5 Evaluating.

The certificate holder should implement processes and procedures for correction and evaluation of the root cause to prevent reoccurrence of undeclared dangerous goods. This process should include the means to mitigate the risk of undeclared shipments in the certificate holder's policies for risk management.

A.5 **Plan Considering Proactive and Reactive Actions.**

It is essential to educate personnel that conduct acceptance, rejection, handling, storage, packaging, and loading of items for transport onboard an aircraft on the techniques for preventing the transport of undeclared dangerous goods by air. Certificate holders have historically trained their personnel in the transport job functions to prevent noncompliant and undeclared dangerous goods shipments from entering the air transportation system. However, most actions performed by certificate holder's personnel could be considered reactive, as the undeclared shipment has already entered the air transportation system when offered by the shipper. In this Appendix, proactive is an action that could prevent a shipper or passenger from offering undeclared dangerous goods to be transported by the certificate holder. The object of a complete plan would be to complement the reactive with proactive actions to mitigate the risk of having the noncompliant shipment in the system.

Advisory Circular Feedback

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by (1) emailing this form to Thomas.L.Kenny@faa.gov or (2) faxing it to the attention of the Office of Hazardous Materials Safety – Systems Oversight at (202) 267-9450.

Subject: 14 CFR Part 121 and Part 135 Dangerous Goods Transportation Operations

Date: _____

Please check all appropriate line items:

☐ An error (procedural or typographical) has been noted in paragraph Click here to enter text. on page Click here to enter text..

☐ Recommend paragraph Click here to enter text. on page Click here to enter text. be changed as follows:

Click here to enter text.

☐ In a future change to this AC, please cover the following subject:
(Briefly describe what you want added.)

Click here to enter text.

☐ Other comments:

Click here to enter text.

☐ I would like to discuss the above. Please contact me.

Submitted by: _____ Date: _____