Chapter 4
Regulation of Air Cargo

4.1 Regulations Under ICAO'S Preview

4.1.1 Facilitation

Annex 9 to the Chicago Convention[1] in its Chapter 4 has several provisions pertaining to cargo which comes under the purview of ICAO. With a view to facilitating and expediting the release and clearance of goods carried by air, Contracting States are required to adopt regulations and procedures appropriate to air cargo operations and shall apply them in such a manner as to prevent unnecessary delays. Standards and Recommended Practices[2] on Facilitation were first adopted by the Council on 25 March 1949, pursuant to the provisions of Article 37 of the Convention on International Civil Aviation (Chicago, 1944), and designated as Annex 9 to the Convention with the title "Standards and Recommended Practices — Facilitation".[3] They became effective on 1 September 1949. To begin with, States are advised that

[1] Thirteenth Edition, July 2011.

[2] The Standards and Recommended Practices on Facilitation are the outcome of Article 37 of the Convention, which provides, *inter alia,* that the "International Civil Aviation Organization shall adopt and amend from time to time, as may be necessary, international standards and recommended practices and procedures dealing with . . . customs and immigration procedures . . . and such other matters concerned with the safety, regularity and efficiency of air navigation as may from time to time appear appropriate".

[3] The Standards and Recommended Practices on Facilitation inevitably take two forms: first a "negative" form, e.g. that States shall not impose more than certain maximum requirements in the way of paperwork, restrictions of freedom of movement, etc., and second a "positive" form, e.g. that States shall provide certain minimum facilities for passenger convenience, for traffic which is merely passing through, etc. Whenever a question arises under a "negative" provision, it is assumed that States will, wherever possible, relax their requirements below the maximum set forth in the Standards and Recommended Practices. Wherever there is a "positive" provision, it is assumed that States will, wherever possible, furnish more than the minimum set forth in the Standards and Recommended Practices.

R. Abeyratne, *Law and Regulation of Air Cargo*,
https://doi.org/10.1007/978-3-319-92489-2_4

with respect to cargo moving by both air and surface transport under an air waybill, Contracting States should apply the same regulations and procedures and in the same manner as they are applied to cargo moving solely by air. When introducing or amending regulations and procedures for the release and clearance of goods carried by air, Contracting States are required to l consult with aircraft operators and other parties concerned, with the aim of accomplishing the actions set forth in the Annex. Furthermore, Contracting States are required to develop procedures for the pre-arrival and pre-departure lodgement of an import and export goods declaration to enable expeditious release/clearance of the goods. Where the nature of a consignment could attract the attention of different public authorities, e.g. the customs, veterinary or sanitary controllers, Contracting States shall endeavour to delegate authority for release/clearance to customs or one of the other agencies or, where that is not feasible, take all necessary steps to ensure that release/clearance is coordinated and, if possible, carried out simultaneously and with a minimum of delay. Contracting States are not normally expected to require the physical examination of cargo to be imported or exported and are required to use risk management to determine which goods shall be examined and the extent of that examination. Where practicable, and with a view to improving efficiency, modern screening or examination techniques are required to be used to facilitate the physical examination of goods to be imported or exported.

The Annex recommends that, in connection with international airports, Contracting States should establish and either develop and operate themselves, or permit other parties to develop and operate, free zones and/or customs warehouses and should publish detailed regulations as to the types of operations which may or may not be performed therein. In all cases where free-zone facilities and/or customs warehouses are not provided in connection with an international airport but have been provided elsewhere in the same general vicinity, Contracting States are required to make arrangements so that air transport can utilize these facilities on the same basis as other means of transport. With regard to information required by the public authorities, Contracting States should provide for the electronic submission of cargo information prior to the arrival or departure of cargo. Contracting States shall limit their data requirements to only those particulars which are deemed necessary by the public authorities to release or clear imported goods or goods intended for exportation. And are further required to provide for the collection of statistical data at such times and under such arrangements so that the release of imported goods or those intended for exportation is not delayed thereby. Subject to the technological capabilities of the Contracting State, documents for the importation or exportation of goods, including the Cargo Manifest and/or air waybills, will be accepted when presented in electronic form transmitted to an information system of the public authorities.

The production and presentation of the Cargo Manifest and the air waybill (s) are to be the responsibility of the aircraft operator or his authorized agent. The production and presentation of the other documents required for the clearance of the goods shall be the responsibility of the declarant. Where a Contracting State has requirements for additional documents for import, export or transit formalities, such as

commercial invoices, declaration forms, import licences and the like, it shall not make it the obligation of the aircraft operator to ensure that these documentary requirements are met nor shall the operator be held responsible, fined or penalized for inaccuracies or omissions of facts shown on such documents unless he is the declarant himself, is acting on his behalf or has specific legal responsibilities. When documents for the importation or exportation of goods are presented in paper form, the format is required to be based on the UN layout key, as regards the goods declaration, as regards the Cargo Manifest. To promote trade facilitation and the application of security measures, Contracting States are further required, for the purpose of standardization and harmonization of electronic data interchange, to encourage all parties concerned, whether public or private, to implement compatible systems and to use the appropriate internationally accepted standards and protocols.

Electronic information systems for the release and clearance of goods should cover their transfer between air and other modes of transport. Contracting States requiring supporting documents, such as licences and certificates, for the importation or exportation of certain goods are required to publish their requirements and establish convenient procedures for requesting the issue or renewal of such documents. They also should to the greatest extent possible, remove any requirement to manually produce supporting documents and should establish procedures whereby they can be produced by electronic means. Contracting States cannot require consular formalities or consular charges or fees in connection with documents required for the release or clearance of goods.

In the context of release and clearance of export cargo**,** Contracting States requiring documents for export clearance are required to normally limit their requirement to a simplified export declaration and provide for export cargo to be released up to the time of departure of an aircraft. Contracting States are required to allow goods to be exported, to be presented for clearance at any customs office designated for that purpose. Transfer from that office to the airport from which the goods are to be exported will be carried out under the procedures laid down in the laws and regulations of the Contracting State concerned. Such procedures shall be as simple as possible. Contracting States are precluded by the Annex to require evidence of the arrival of exported goods for import, export or transit formalities as a matter of course. When the public authorities of a Contracting State require goods to be examined, but those goods have already been loaded on a departing aircraft, the aircraft operator or, where appropriate, the operator's authorized agent, should normally be permitted to provide security to the customs for the return of the goods rather than delay the departure of the aircraft.

On the release and clearance of import cargo**, w**hen scheduling examinations, priority shall be given to the examination of live animals and perishable goods and to other goods which the public authorities accept are urgently required. Consignments declared as personal effects and transported as unaccompanied baggage will be cleared under simplified arrangements and Contracting States are required to provide for the release or clearance of goods under simplified customs procedures provided that: (a) the goods are valued at less than a maximum value below which no import duties and taxes will be collected; or (b) the goods attract

import duties and taxes that fall below the amount that the State has established as the minimum for collection; or (c) the goods are valued at less than specified value limits below which goods may be released or cleared immediately on the basis of a simple declaration and payment of, or the giving of security to the customs for, any applicable import duties and taxes; or (d) the goods are imported by an authorized person and are goods of a specified type.

For authorized importers who meet specified criteria, including an appropriate record of compliance with official requirements and a satisfactory system for managing their commercial records, it is recommended that Contracting States establish special procedures, based on the advance supply of information, which provide for the immediate release of goods on arrival. Goods not afforded the simplified or special procedures referred to in provisions should be released or cleared promptly on arrival, subject to compliance with customs and other requirements. Contracting States should establish as a goal the release of all goods that do not need any examination, within 3 h of their arrival and the submission of the correct documentation. Public authorities, and aircraft operators and importers or their authorized agents, should coordinate their respective functions to ensure that this goal is met. Contracting States should also process requests for the release of part consignments when all information has been submitted and other requirements for such part consignments have been met, they are required to allow goods that have been unladen from an aircraft at an international airport to be transferred to any designated customs office in the State concerned for clearance. The customs procedures covering such transfer is required to be as simple as possible. When, because of error, emergency or inaccessibility upon arrival, goods are not unladen at their intended destination, Contracting States cannot impose penalties, fines or other similar charges provided: (a) the aircraft operator or his authorized agent notifies the customs of this fact, within any time limit laid down; (b) a valid reason, acceptable to the customs authorities, is given for the failure to unload the goods; and (c) the Cargo Manifest is duly amended.

In an instance where, because of error or handling problems, goods are unladen at an international airport without being listed on the Cargo Manifest, Contracting States shall not impose penalties, fines or other similar charges provided: (a) the aircraft operator or his authorized agent notifies the customs of this fact, within any time limit laid down; (b) a valid reason, acceptable to the customs, is given for the non-reporting of the goods; (c) the manifest is duly amended; and d) the goods are placed under the appropriate customs arrangements. Where applicable, the Contracting State is required to, subject to compliance with its requirements, facilitate the forwarding of the goods to their correct destination. If goods are consigned to a destination in a Contracting State but have not been released for home use in that State and subsequently are required to be returned to the point of origin or to be redirected to another destination, the Contracting State is required to allow the goods to be re-forwarded without requiring import, export or transit licences if no contravention of the laws and regulations in force is involved. A Contracting State has to absolve the aircraft operator or, where appropriate, his authorized agent, from liability for import duties and taxes when the goods are placed in the custody of the

public authorities or, with the latter's agreement, transferred into the possession of a third party who has furnished adequate security to the customs.

On the subject of spare parts, equipment, stores and other material imported or exported by aircraft operators in connection with international services**, s**tores and commissary supplies imported into the territory of a Contracting State for use on board aircraft in international service will be relieved from import duties and taxes, subject to compliance with the customs regulations of the State. Contracting States should not require supporting documentation (such as certificates of origin or consular or specialized invoices) in connection with the importation of stores and commissary supplies. They should also permit, on board aircraft, the sale or use of commissary supplies and stores for consumption without payment of import duties and other taxes in the case where aircraft, engaged in international flights: (a) stop at two or more international airports within the territory of a Contracting State without intermediate landing in the territory of another State; and (b) do not embark any domestic persons. Subject to compliance with its regulations and requirements, a Contracting State should allow relief from import duties and taxes in respect of ground and security equipment and their component parts, instructional material and training aids imported into its territory, by or on behalf of an aircraft operator of another Contracting State for use by the operator or his authorized agent, within the boundaries of an international airport or at an approved off-airport facility.

Contracting States are required by the Annex to grant prompt release or clearance, upon completion of simplified documentary procedures by the aircraft operator or his authorized agent, of aircraft equipment and spare parts that are granted relief from import duties, taxes and other charges under Article 24[4] of the Chicago Convention. Contracting States are required to grant prompt release or clearance, upon completion of simplified documentary procedures by the aircraft operator or his authorized agent, of ground and security equipment and their replacement parts, instructional material and training aids imported or exported by an aircraft operator of another Contracting State. Contracting States must allow the loan, between aircraft operators of other Contracting States or their authorized agents, of aircraft equipment, spare parts and ground and security equipment and their replacement parts, which have been imported with conditional relief from import duties and taxes, and should provide for the importation, free of import duties and taxes, of

[4] Article 24, which addresses customs duty provides that: (a) aircraft on a flight to, from, or across the territory of another contracting State shall be admitted temporarily free of duty, subject to the customs regulations of the State. Fuel, lubricating oils, spare parts, regular equipment and aircraft stores on board an aircraft of a contracting State, on arrival in the territory of another contracting State and retained on board on leaving the territory of that State shall be exempt from customs duty, inspection fees or similar national or local duties and charges. This exemption shall not apply to any quantities or articles unloaded, except in accordance with the customs regulations of the State, which may require that they shall be kept under customs supervision; (b) Spare parts and equipment imported into the territory of a contracting State for incorporation in or use on an aircraft of another contracting State engaged in international air navigation shall be admitted free of customs duty, subject to compliance with the regulations of the State concerned, which may provide that the articles shall be kept under customs supervision and control.

aircraft operators' documents as defined in the Annex, to be used in connection with international air services.

In the context of containers and pallets**, s**ubject to compliance with their regulations and requirements, Contracting States are required to grant the aircraft operators of other Contracting States temporary admission of containers and pallets—whether or not owned by the aircraft operator of the aircraft on which they arrive—provided they are to be used on an outbound international service or otherwise re-exported. They should require a temporary admission document for containers and pallets only when they consider it essential for the purposes of customs control. Where proof of the re-exportation of containers and pallets is required, the Contracting State should accept the appropriate usage records of the aircraft operator or his authorized agent as evidence thereof. Under Annex 9, Contracting States must make arrangements to allow aircraft operators, under supervision of the public authorities concerned, to unload transit cargo arriving in containers and pallets, so that they may sort and reassemble shipments for onward carriage without having to undergo clearance for home use. Containers and pallets imported into a Contracting State under the provisions of will be allowed to leave the boundaries of the international airport for the release or clearance of imported loads, or for export lading, under simplified documentation and control arrangements. Where circumstances so require, Contracting States must allow the storage of temporarily admitted containers and pallets at off-airport locations. They are also required to allow the loan between aircraft operators of containers and pallets admitted without payment of import duties and taxes, provided they are to be used only on an outbound international service or otherwise re-exported Contracting States must allow temporarily admitted containers and pallets to be re-exported through any designated customs office. They also must allow the temporary admission of replacement parts when they are needed for the repair of containers and pallets.

In terms of mail documents and procedures**,** Contracting States shall carry out the handling, forwarding and clearance of mail and shall comply with the documentary procedures as prescribed by the Acts in force of the Universal Postal Union. On the subject of radioactive material**,** a Contracting State is required to facilitate the prompt release of radioactive material being imported by air, particularly material used in medical applications, provided that applicable laws and regulations governing the importation of such material are complied with. The Annex adds that the advance notification, either in paper form or electronically, of the transport of radioactive materials would likely facilitate the entry of such material at the State of destination. The Annex further stipulates that a Contracting State should avoid imposing customs or other entry/exit regulations or restrictions supplementary to the provisions of Doc 9284, Technical Instructions for the Safe Transport of Dangerous Goods by Air, and that where a Contracting State adopts customs or other entry/exit regulations or restrictions that differ from those specified in Doc 9284, *Technical Instructions for the Safe Transport of Dangerous Goods by Air*, it is required to notify ICAO promptly of such State variations for publication in the Technical Instructions, in accordance with Chapter 2, 2.5 of Annex 18 on security.

4.1.2 Facilitation Manual

The basic philosophy applicable to both the Annex on Facilitation and the Facilitation Manual[5] is based on strategy formulation and risk management as a basis for selecting shipments to be examined or for selecting the level of control to be imposed on a shipment or class of shipments. The strategy is to standardize information requirements and formats (including machine readable data). Annex 9 defines the terms "release" and "clearance", where "clearance" is given only when all official requirements have been met, while "release" means that customs put the goods at the disposal of the person concerned whether or not all the customs formalities have been completed and whether or not the goods can actually be cleared at that time.

Goods shipped by air are often cleared and released at virtually the same time, particularly when everything is in order and automated clearance processes are being used. In many instances, however, in order not to hold up goods unnecessarily, customs may release them, and actual clearance is granted only subsequently. This happens on an agreed basis under the Annex. The Manual recommends that when releasing goods in such circumstances, customs needs to be satisfied that there is no risk of non-compliance with the law, all official requirements will be met, and formalities will be completed in due course. In addition, where import duties and taxes have not been paid, customs must be assured that security for their payment has been provided. The rapid release of goods is clearly a major facilitation indicator for importers and exporters.

In practice, the application of sound, effective, modern procedures as specified in Annex 9, regarding the treatment of goods, makes it possible to offer a wide range of useful facilitative measures without compromising security and compliance procedures. In fact, such measures usually serve to enhance the capability of the authorities to manage their control processes and enforce the laws. This depends, however, on good levels of communication and information exchange among all concerned, both nationally and internationally.

Risk management is defined in Annex 9 as "The systematic application of management procedures and practices which provide border inspection agencies with the necessary information to address movements or consignments which represent a risk." In this context, "risk" means the potential for non-compliance with the law; while "risk management" means risk analysis, risk indicators, risk assessment and risk profiling. It also includes the acceptance of a certain level of risk in consignments in the interests of focusing resources on those goods and circumstances where risk is considered to be highest and enforcement action most likely to be needed. Customs and other authorities, whose size and resources are static or actually decreasing, have to deal with the considerable growth in international trade volumes while at the same time provide simplified documentation and procedures, as well as immediate release/clearance of goods to meet business demands for on-schedule delivery. This means that they can no longer use traditional methods of controlling

[5] Doc 9957: First Edition, 2011.

goods on an individual consignment basis to ensure that the correct revenue is collected, trade policy agreements (quotas, preferences) are enforced and that prohibited or restricted goods are detected and dealt with appropriately. To attempt to do so would place unrealistic burdens on customs and result in unacceptable delays in releasing/clearing goods.

Risk management is the overarching principle in modern customs control arrangements. Essential elements in a successful programme include: identification and analysis of the risk; selectivity, profiling and targeting; monitoring and review; and the measurement of compliance; all supported by appropriate information technology, customs/trade cooperation and mutual assistance among customs administrations.

Customs have therefore introduced a range of special procedures for importers/exporters whom they are satisfied comply with official requirements, as well as introduced controls based on risk analysis and assessment to enable them to release/clear the great majority of goods (innocent goods) without delay, so that their efforts and resources can be concentrated on those goods considered to pose a high risk.

Automation of the air cargo clearance process is high on the agenda of customs services worldwide as it is the most efficient means of managing a vast amount of data which is exchanged among a number of parties, i.e. customs, shippers, consignees, air carriers, customs brokers, and agriculture and other interested government agencies. The need to enhance controls in the face of increased risks posed by drug trafficking, violations of intellectual property rights, smuggling of endangered species and other illegal activities, combined with the growth in international trade volumes, has made it increasingly difficult for government inspection agencies to perform their enforcement duties with manual procedures alone. Moreover, studies of traditional air cargo systems without the assistance of information technology have concluded that the average "dwell-time" of an imported shipment (from its arrival to its release for delivery) is 4.5 days—a delay which to most air cargo customers is unacceptable. Automated solutions are sought by air carriers, customs brokers, and the authorities, to ensure better compliance with laws and faster clearance of low-risk cargo by managing the traffic more efficiently.

There are many facets to the use of information technology at international airports such as: documentation relating to the arrival and departure of aircraft; the goods and stores carried, unloaded and taken on board; temporary stores accounting; customs warehouse control; the electronic granting of release/clearance of goods; and electronic payment arrangements.

Automated cargo systems consist of two principal components: (1) a system for processing entries in an automated manner is fundamental to the States in which customs is automated; and (2) the automated manifest component, used in some States, completes the air cargo clearance process.

Cargo Manifest and air waybill data, which are transmitted by the air carrier, are matched in the automated customs system with entry data that has been transmitted by the importer or customs broker. These data are then reviewed by the inspector, with the aid of databases to determine whether the goods can be released or whether a further documentary check or a physical examination needs to be made. If the

information from both components of the system is transmitted early enough, this decision can be made before the arrival of the flight.

In some countries, release/clearance can be granted before the goods arrive. In other countries, the goods must be physically present before release/clearance can be granted; however, if practical arrangements are in place, traders should not suffer any delay in obtaining their goods. Prompt release of consignments from customs is of particular interest to consignees, cargo agents, and operators. Annex 9 encourages the simplification and standardization of the documents, procedures and requirements for: the release and clearance of import/export cargo; the reduction, to a minimum, of cargo "dwell-time" in airport terminals; transferring cargo to an authorized customs office for customs entry and clearance; releasing a part of a consignment when certain requirements have been met; and facilitating the tax free or temporary admission and use of spare parts, equipment, stores, containers, pallets, and other material imported/exported by operators in connection with international services. All these measures help to alleviate congestion and prevent unnecessary delays.

In the context of the movement of cargo by air and subsequently by surface, the principles for the release and clearance of goods are similar whether by air or surface transport—they both include the lodgement of the goods declaration and supporting documents, documentary checks, examination of the goods when necessary, security for, or payment of, the import/export duties and taxes. In practice, however, given that a relatively high proportion of goods carried by air is composed of small consignments which are usually urgently required (parcels transported by express carriers, postal items, etc.), there is frequent use of the special procedures referred to the Annex. In the case of bi-modal shipments, the fact that they are contracted under an air waybill should indicate their treatment by the authorities as air cargo, notwithstanding delivery by surface transport to their destination.

4.2 Carriage of Dangerous Materials

Provisions on the regulation of dangerous goods are contained in Annex 18 to the Chicago Convention.[6] The Annex starts with dangerous goods technical instructions saying that each Contracting State is required to take the necessary measures to achieve compliance with the detailed provisions contained in the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council. Each Contracting State shall also take the necessary measures to achieve compliance with any amendment to the Technical Instructions which may be published during the specified period of applicability of an edition of the Technical Instructions. In this regard each Contracting State should inform ICAO of

[6] Third Edition July 2001.

difficulties encountered in the application of the Technical Instructions and of any amendments which it would be desirable to make to them.

The latest edition of Annex 18 (at the time of writing) released in 2001 states that although an amendment to the Technical Instructions with an immediate applicability for reasons of safety may not yet have been implemented in a Contracting State, such State should, nevertheless, facilitate the movement of dangerous goods in its territory which are consigned from another Contracting State in accordance with that amendment, providing the goods comply in total with the revised requirements. In the context of domestic civil aircraft operations. The Annex states that in the interests of safety and of minimizing interruptions to the international transport of dangerous goods, Contracting States should also take the necessary measures to achieve compliance with the Annex and the Technical Instructions for domestic civil aircraft operations.

The Annex provisions do not apply to articles and substances which would otherwise be classed as dangerous goods, but which are required to be aboard the aircraft in accordance with the pertinent airworthiness requirements and operating regulations, or for those specialized purposes identified in the Technical Instructions. Where articles and substances intended as replacements for those described above or which have been removed for replacement are carried on an aircraft, they are required to be transported in accordance with the provisions of this Annex except as permitted in the Technical Instructions. Specific articles and substances carried by passengers or crew members are excepted from the provisions of the Annex to the extent specified in the Technical Instructions.

Where a Contracting State adopts different provisions from those specified in the Technical Instructions, such State is required to notify ICAO promptly of such State variations for publication in the Technical Instructions. Contracting States are expected to notify a difference under Article 38 of the Convention only if they are unable to accept the binding nature of the Technical Instructions. Where States have adopted different provisions from those specified in the Technical Instructions, they are expected to be reported only under the provisions of the Annex specified for that purpose. The State of the Operator must take the necessary measures to ensure that when an operator adopts more restrictive requirements than those specified in the Technical Instructions, the notification of such operator variations is made to ICAO for publication in the Technical Instructions.

In terms of surface transport States should make provisions to enable dangerous goods intended for air transport and prepared in accordance with the ICAO Technical Instructions to be accepted for surface transport to or from aerodromes. Each Contracting State must designate and specify to ICAO an appropriate authority within its administration to be responsible for ensuring compliance with this Annex. The Annex goes on further to say that the transport of dangerous goods by air shall be forbidden except as established in this Annex and the detailed specifications and procedures provided in the Technical Instructions. The dangerous goods described hereunder shall be forbidden on aircraft unless exempted by the States concerned under the provisions of 2.1 or unless the provisions of the Technical Instructions indicate they may be transported under an approval issued by the State of Origin:

articles and substances that are identified in the Technical Instructions as being forbidden for transport in normal circumstances; and infected live animals. Articles and substances that are specifically identified by name or by generic description in the Technical Instructions as being forbidden for transport by air under any circumstances shall not be carried on any aircraft.

The classification of an article or substance shall be in accordance with the provisions of the Technical Instructions. The detailed definitions of the classes of dangerous goods are contained in the Technical Instructions. These classes identify the potential risks associated with the transport of dangerous goods by air and are those recommended by the United Nations Committee of Experts on the Transport of Dangerous Goods.

An important area in the carriage of goods and their regulation is packing. Annex 18 addresses this issue in chapter 5. Packagings used for the transport of dangerous goods by air shall be of good quality and must be constructed and securely closed so as to prevent leakage which might be caused in normal conditions of transport, by changes in temperature, humidity or pressure, or by vibration. Packagings are required to be suitable for the contents and those packagings that are in direct contact with dangerous goods must be resistant to any chemical or other action of such goods. Most importantly, packagings must meet the material and construction specifications in the Technical Instructions and be tested in accordance with the provisions of the Technical Instructions.

Packagings for which retention of a liquid is a basic function, must be capable of withstanding, without leaking, the pressure stated in the Technical Instructions. Inner packagings must be so packed, secured or cushioned as to prevent their breakage or leakage and to control their movement within the outer packaging(s) during normal conditions of air transport. Cushioning and absorbent materials shall not react dangerously with the contents of the packagings. Additionally, no packaging shall be re-used until it has been inspected and found free from corrosion or other damage. Where a packaging is re-used, all necessary measures shall be taken to prevent contamination of subsequent contents. If by virtue of the nature of the packaging, there is a likelihood that uncleaned empty packagings may present a hazard, they must be tightly closed and treated according to the hazard they constitute. No harmful quantity of a dangerous substance must adhere to the outside of packages. Unless otherwise provided for in the Technical Instructions, each package of dangerous goods must be labelled with the appropriate labels and in accordance with the provisions set forth in those Instructions.

In terms of markings, unless otherwise provided for in the Technical Instructions, each package of dangerous goods must be marked with the proper shipping name of its contents and, when assigned, the UN number and such other markings as may be specified in those Instructions. Unless otherwise provided for in the Technical Instructions, each packaging manufactured to a specification contained in those Instructions must be so marked in accordance with the appropriate provisions of those Instructions and no packaging has to be marked with a packaging specification marking unless it meets the appropriate packaging specification contained in those Instructions. Unless otherwise provided for in the Technical Instructions, each

package of dangerous goods shall be marked with the proper shipping name of its contents and, when assigned, the UN number and such other markings as may be specified in those Instructions. Furthermore, unless the Technical Instructions provide otherwise, each packaging manufactured to a specification contained in those Instructions shall be so marked in accordance with the appropriate provisions of those Instructions and no packaging shall be marked with a packaging specification marking unless it meets the appropriate packaging specification contained in those Instructions.

In addition to the languages required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the markings related to dangerous goods.

Responsibilities of the shipper are addressed in Chapter 7 of the Annex which stipulates that in addition to the languages required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the markings related to dangerous goods. that they are classified, packed, marked, labelled, and in proper condition for transport by air in accordance with the relevant regulation. In addition to the languages which may be required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the dangerous goods transport document. Responsibilities of the operator, which are in Chapter 8 state that an operator shall not accept dangerous goods for transport by air: unless the dangerous goods are accompanied by a completed dangerous goods transport document, except where the Technical Instructions indicate that such a document is not required; and; until the package, overpack or freight container containing the dangerous goods has been inspected in accordance with the acceptance procedures contained in the Technical Instructions.

Packages and overpacks containing dangerous goods and freight containers containing radioactive materials shall be loaded and stowed on an aircraft in accordance with the provisions of the Technical Instructions. Packages and overpacks containing dangerous goods and freight containers containing radioactive materials must be inspected for evidence of leakage or damage before loading on an aircraft or into a unit load device. Leaking or damaged packages, overpacks or freight containers shall not be loaded on an aircraft. A unit load device must not be loaded aboard an aircraft unless the device has been inspected and found free from any evidence of leakage from, or damage to, any dangerous goods contained therein.

Where any package of dangerous goods loaded on an aircraft appears to be damaged or leaking, the operator is required to remove such package from the aircraft or arrange for its removal by an appropriate authority or organization, and thereafter shall ensure that the remainder of the consignment is in a proper condition for transport by air and that no other package has been contaminated. Packages or overpacks containing dangerous goods and freight containers containing radioactive materials must be inspected for signs of damage or leakage upon unloading from the aircraft or unit load device. If evidence of damage or leakage is found, the area where the dangerous goods or unit load device were stowed on the aircraft shall be inspected for damage or contamination.

Dangerous goods must not be carried in an aircraft cabin occupied by passengers or on the flight deck of an aircraft, except in circumstances permitted by the provisions of the Technical Instructions. An aircraft which has been contaminated by radioactive materials shall immediately be taken out of service and not returned to service until the radiation level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions. Packages containing dangerous goods which might react dangerously one with another must not be stowed on an aircraft next to each other or in a position that would allow interaction between them in the event of leakage.

Packages of toxic and infectious substances shall be stowed on an aircraft in accordance with the provisions of the Technical Instructions. Packages of radioactive materials must be stowed on an aircraft so that they are separated from persons, live animals and undeveloped film, in accordance with the provisions in the Technical Instructions. When dangerous goods subject to the provisions contained herein are loaded in an aircraft, the operator is required to protect the dangerous goods from being damaged and shall secure such goods in the aircraft in such a manner that will prevent any movement in flight which would change the orientation of the packages. For packages containing radioactive materials, the securing shall be adequate to ensure that the separation requirements of 8.7.3 are met always.

Each Contracting State is required to establish inspection, surveillance and enforcement procedures with a view to achieving compliance with its dangerous goods regulations. Cooperation between States is essential, and each Contracting State should participate in cooperative efforts with other States concerning violations of dangerous goods regulations, with the aim of eliminating such violations. Cooperative efforts could include coordination of investigations and enforcement actions; exchanging information on a regulated party's compliance history; joint inspections and other technical liaisons, exchange of technical staff, and joint meetings and conferences. Appropriate information that could be exchanged include safety alerts, bulletins or dangerous goods advisories; proposed and completed regulatory actions; incident reports; documentary and other evidence developed in the investigation of incidents; proposed and final enforcement actions; and educational/outreach materials suitable for public dissemination.

Furthermore, Each Contracting State should take appropriate action to achieve compliance with its dangerous goods regulations, including the prescription of appropriate penalties for violations, when information about a violation is received from another Contracting State, such as when a consignment of dangerous goods is found not to comply with the requirements of the Technical Instructions on arrival in a Contracting State and that State reports the matter to the State of Origin.

Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284), provides that Security awareness training should address the nature of security risks, recognizing security risks methods to address and reduce such risks, and actions to be taken in the event of a security breach. It should include awareness of security plans (if appropriate) commensurate with the responsibilities of individuals and their part in implementing security plans.

It must be noted that the technical instructions are mainly for the operator of the aircraft. However, as dangerous goods are in the premises of the airport operator at some point, the airport operator has to be aware of and application of provisions for dangerous goods that may be carried by the passenger in the cabin. Addendum 1 to the Technical Instructions in 2017 includes certain categories of equipment that are carried by the passenger which may be harmful.

4.3 Carriage of Human Remains

If a person dies in a country other than his own, there are no global rules or guidance that dictates the manner in which his remains could be transported back to his country, with dignity and care. This matter was highlighted in 2003 before the European Parliament with a real example of a British national who died while on holiday in Greece. The Greek authorities had carried out an autopsy which concluded that the deceased tourist had died of a heart attack. When the body was transported back home the deceased's family had requested a second autopsy, only to find that most of the deceased's organs had been removed in Greece after the autopsy and destroyed, according to Greek law. This had caused severe mental distress to the deceased's kin. To their credit, airlines, under the guidance of the International Air Transport Association (IATA), have adopted their own principles in carrying human remains with compassion and dedication. The conclusion suggests a way forward in binding the threads of this issue in a harmonious manner.

Human dignity is an international concept which is extended both to the living and the dead. The 1948 *Universal Declaration of Human Rights* of the United Nations—the cornerstone of human dignity—declares that the inherent dignity and the equal and inalienable rights of all members of the human family are the foundations of freedom, justice and peace in the world and that all human beings are born free and equal in dignity and rights. This statement establishes human dignity as the conceptual basis for human rights. 75% of the constitutions of ICAO's 192 member States use the concepts of "human dignity" or "personal dignity" explicitly.[7] It follows therefore that if the remains of a human being are not given equal respect and dignity, the moral imperative of the doctrine of human dignity[8] would be rendered destitute of meaning and purpose.

From an aviation perspective, most airlines in the world offer services for the transportation of human remains and cremated remains. These services are varied according to the policies of each airline, but all share a common thread of dedication and compassion in offering the service in the transportation of funeral shipments.

[7] http://www.constitution.org; http://www.oefre.unibe.ch/law/icl; http://www.psr.keele.ac.uk.

[8] Human dignity has not been comprehensively defined and has remained a somewhat squishy subject, often explained theologically. However, the dictionary definition of dignity is that it is *inter alia* "the quality or state of being worthy of esteem or respect". See http://www.thefreedictionary.com/dignity.

Usually, airlines employ specially trained staff to address all the travel-related issues that may arise when shipping such very sensitive cargo. The tasks assigned to these staff include providing advice to those seeking the airlines' services on applicable regulations, taking into account the delicateness of the responsibility that devolves upon the carrier.

In terms of property rights pertaining to some cadaver or other remains, such rights do not exist at common law. However, for the purpose of transportation—whether it be for embalming, cremation or internment—the corpse or cremated remains of a human being is considered to be property or quasi-property, the rights to which are held by the surviving spouse or next of kin. This right cannot be transferred and does not exist while the deceased is living. A corpse or urn carrying cremated remains may not be retained by either an undertaker or a carrier as security for unpaid funeral expenses, particularly if such were kept without authorization and payment was demanded as a condition precedent to its release. Upon burial the body accrues to the ground and any appurtenant property such as jewelry which was on the corpse on burial accrue to their rightful owner as determined by applicable principles of property laws and wills and testaments as they might exist.

The purpose of this discussion is to inquire into *de lege lata* the fragmented regime applicable to the carriage by air of human remains. Two antiquated multilateral agreements, one Resolution and one Regulation all in Europe; some maundering by the ICAO Council decades ago; two Annexes to the Chicago Convention which may have applicability to this subject; some proactive guidelines by the International Air Transport Association and the World Health Organization and procedures and policy of individual air carriers comprise the history of this subject. Against this backdrop, this article will inquire into the need for a global regulatory process that would properly address this esoteric but important area of carriage by air.

4.3.1 The Berlin Agreement of 1937

The *International Arrangement Concerning the Conveyance of Corpses*[9] (Berlin Agreement), signed at Berlin on 10 February 1937 was the first recorded attempt at the unification of rules relating to the carriage of human remains. The agreement, which applied to the international transport of corpses immediately after decease or exhumation, was designed to avoid the difficulties resulting from differences in the regulations concerning the conveyance of corpses, and recognized the necessity and the convenience of laying down uniform regulations in this area of transportation. Accordingly, the signatory States[10] undertook to accept the entry into their territory,

[9] League of Nations, Treaty Series 1938, No. 439r at 315–325.

[10] Germany, Belgium, Chile Denmark, Egypt, France, Italy, the Netherlands, Switzerland, Czechoslovakia and Turkey.

or the passage in transit through their territory, of the corpses of persons deceased in the territory of any one of the other contracting countries upon certain conditions, which were incorporated in the Agreement.

The initial condition, as laid out in Article 1 of the Agreement was that, for the conveyance of any corpse by any means and under any conditions, a special laissez-passer be issued for a corpse which would state the surname, first name and age of the deceased person, and the place, date and cause of decease. The competent authority for the place of decease or the place of burial in the case of corpses exhumed had to issue the laissez-passer and it was recommended that the laissez-passer should be made out, not only in the language of the country issuing it, but also in at least one of the languages most frequently used in international relations.

The Berlin Agreement further stated that neither the country of destination nor the countries of transit shall require, over and above such papers as are required under international conventions for the purpose of transports in general, any document other than the laissez-passer referred to in Article 1. The following had to be presented to the competent authority for the issuance of laissez-passer: a certified true copy of the death certificate; and official certificates to the effect that conveyance of the corpse is not open to objection from the point of view of health or from the medico-legal point of view, and evidence that the corpse has been placed in a coffin in accordance with the regulations laid down in the Agreement.[11]

As for packaging the human remains, the Agreement, in Article 3 provided that corpses must be placed in a metal coffin, the bottom of which has been covered with a layer approximately 5 cm. of absorbent matter such as peat, sawdust, powdered charcoal or the like with the addition of an antiseptic substance. Where the cause of decease was a contagious disease, the corpse itself was required to be wrapped in a shroud soaked in an antiseptic solution. A further requirement was that the metal coffin must thereupon be hermetically closed (soldered) and fitted into a wooden coffin in such a manner as to preclude movement. The wooden coffin was required to be of a thickness of not less than 3 cm. and its joints must be completely watertight. It was also required that the coffin be closed by means of screws not more than 20 cm. distant from one another, and strengthened by metal hoops. In the case of transport by air, The Agreement, in Article 7, required that coffins must be conveyed either in an aircraft specially and solely used for the purpose or in a special compartment solely reserved for the purpose in an ordinary aircraft.

The Agreement precluded bodies of persons who had died as a cause of plague, cholera, small-pox or typhus from being conveyed between the territories of the contracting parties until the lapse of at least one year after the demise. No articles were permitted to be transported along with the coffin in the same aircraft or in the same compartment, other than wreaths, bunches of flowers and the like.[12]

[11] Berlin Agreement, *supra*, note 9, Article 2.

[12] *Id*. Article 4.

4.3.2 *Agreement on the Transfer of Corpses (Strasbourg—1973)*

The second international agreement was in 1973 called the *Agreement on the Transfer of Corpses*, and it was drawn up within the Council of Europe by the European Public Health Committee. The Strasbourg Agreement was opened for signature by the member States of the Council of Europe on 26 October 1973. This agreement was designed to adapt the provisions of the Berlin Agreement concerning the conveyance of corpses, to the new situation arising from developments in the field of communications systems, international relations and commercial and tourist activities. A proposal to examine anew the problem of the transfer of corpses with a view to drawing up a new instrument was approved by the Committee of Ministers of the Council of Europe in 1967 and this task was entrusted to the European Public Health Committee which, in the course of its work, gave due consideration to the observations, among others, of the European Federation of Funeral Directors (Brussels) and the European Funeral Directors Association (Vienna). The text of the draft Agreement was submitted to the European Committee on Legal Co-operation (CCJ) before its final adoption by the Committee of Ministers of the Council of Europe in April 1973. It was opened for signature by member States of the Council of Europe on 26 October 1973.

The Strasbourg Agreement defines the transfer of corpses as the international transport of human remains from the State of departure to the State of destination. Accordingly, the State of departure is that in which the transfer began; in the case of exhumed remains, it is that in which burial had taken place; the State of destination is that in which the corpse is to be buried or cremated after the transport. The Agreement does not apply to the international transport of ashes. Article 3 of the Agreement states that during the transfer, any corpse is required to be accompanied by a special document (laissez-passer for a corpse) issued by the competent authority of the State of departure. The laissez-passer has to include at least the information set out in the model annexed to the Agreement; and be made out in the official language or one of the official languages of the State in which it was issued and in one of the official languages of the Council of Europe.

Article 4 provides that, with the exception of the documents required under international conventions and agreements relating to transport in general, or future conventions or arrangements on the transfer of corpses, neither the State of destination nor the transit State shall require any documents other than the laissez-passer for a corpse. The laissez-passer is issued by the competent authority referred to in Article 8 of the Agreement,[13] after it has been ascertained that: all the medical, health, administrative and legal requirements of the regulations in force in the State of departure relating to the transfer of corpses and, where appropriate, burial and

[13] Article 8 states that each Contracting Party shall communicate to the Secretary General of the Council of Europe the designation of the competent authority referred to in Article 3, paragraph 1, Article 5 and Article 6, paragraphs 1 and 3 of the Agreement.

exhumation have been complied with; the remains have been placed in a coffin which complies with the requirements laid down in Articles 6 and 7 of the Agreement; and that the coffin only contains the remains of the person named in the laissez-passer and such personal effects as are to be buried or cremated with the corpse.

Article 6 requires that the coffin must be impervious and that the inside must contain absorbent material. If the competent authority of the State of departure, consider it necessary the coffin must be provided with a purifying device to balance the internal and external pressures. It may consist of: either an outer coffin in wood with sides at least 20 mm thick and an inner coffin of zinc carefully soldered or of any other material which is self-destroying; or a single coffin in wood with sides at least 30 mm thick lined with a sheet of zinc or of any other material which is self-destroying. If the cause of death is a contagious disease, the body itself is required to be wrapped in a shroud impregnated with an antiseptic solution.

Article 6 further provides that the coffin, if it is to be transferred by air, has to be provided with a purifying device or, failing this, present such guarantees of resistance as are recognised to be adequate by the competent authority of the State of departure. If the coffin is to be transported like an ordinary consignment, it has to be packaged so that it no longer resembles a coffin, and it shall be indicated that it be handled with care.[14]

4.3.3 Resolution 2003/2032 (INI)

The European Community was dissatisfied with both the Berlin Agreement and the Strasbourg Agreement (which only some member States had signed), claiming that these Agreements advocated indirect discrimination by providing for non-European Community residents. Also it was claimed that these two agreements imposed strict rules on the cross-border transfer of mortal remains, applied essentially to 'non-nationals' and hence ran counter to the Community scheme of things. Accordingly, and with a view to addressing the case where a Community citizen expired in a Community country other than his own and his remains had to be repatriated to his country, a Committee was appointed by the European Parliament to consider an instrument that addressed the conveyance of mortal remains suggested in 2003 Resolution 2003/2032 (INI). This Resolution noted that, on account of the above agreements, the death of a Community citizen in a Member State other than his country of origin results in more complex procedures, a longer period of time before burial or cremation takes place and higher costs than if the death had occurred in the deceased person's country of origin,

Another compelling reason for this Resolution was the recognition that, in view of the growth in intra-Community tourism, the increasing numbers of retired people who choose to live in a country other than their own and, more generally, greater intra-Community mobility which is actually encouraged, the number of Community

[14] Article 7 of the Strasbourg Agreement.

citizens who die in a country other than their country of origin was bound to increase. This was considered against the backdrop that Community citizens should, *mutatis mutandis*, be able to move between and reside in Member States in similar conditions to nationals of a Member State moving around or changing their place of residence in their own country, and that exercising the right to freedom of movement and freedom of residence should be facilitated to the utmost by reducing administrative formalities to an absolute minimum.

The European Community was of the view that, at the time the Resolution was proposed, it was still far from true that a Community citizen who dies in a Member State other than his own is treated in the same way as a national who dies in his home country. For, example, the fact that a zinc coffin is required for the repatriation of a corpse from Salzburg to Freilassing (a distance of 10 km) but not for the transfer of a body from Ivalo to Helsinki (a distance of 1120 km) (2).

Therefore it was pointed out that the repatriation of mortal remains without excessive cost or bureaucracy in the event of the death of a European Community citizen in a country other than the one in which either burial or cremation was to take place may be regarded as a corollary of the right of each EU citizen to move and reside freely within the territory of the Member States.

The Resolution called upon the Commission to see that the standards and the procedures applied in the cross-border transportation of corpses were harmonized throughout the Community and to endeavor to ensure that, as far as possible, Community citizens were treated in the same way as nationals in their home country.

A Regulation, covering intra-community transport of bodies according to the European Standard CEN/BT/TF 139 on Funeral Services and approved on 27 July 2005 goes on to say in Article 1 that the identification of the deceased must be performed before the body is placed in the coffin by the funeral enterprise or operator of the country of departure. The elements of identification relate to the civil status of the deceased and are indicated on the laissez-passer for the body. For identification, the body must be provided with: an identification bracelet attached to the body part (wrist, ankle…,); and a non-removable and tamper-proof identification tag attached to the coffin and its wrapping, if any. The information required on the bracelet were: surname and first name(s); sex; date and place of birth; date and place of death; and nationality. The information required on the identification tag were to be: surname and family name(s); date of birth; and date of death.

Article 2 of the Regulation required that the coffin or casket that carried the remains must be made of solid material—the main material used in Europe being wood (excluding the use of carton or chipboard). The material used for the coffin must be biodegradable. It also required that the coffin must be impervious; the products used to make it impervious must be biodegradable and in conformity with the standards applicable to crematorium emissions. In particular, the coffin must be impervious to decomposition liquids and fitted with absorbent material. The out cover of the coffin/casket was required to meet necessary sanitary requirements.

The Regulation had chemical requirements that were not contained in the 1937 Berlin Agreement and the 1973 Strasbourg Agreement. For instance, Articles 2.3

and 2.5, specified conditions for international carriage of corpses by providing that if the cause of death was a contagious disease (as per the WHO official list), the outer container (usually wooden) used for the transport of the body may be lined with a hermetically sealed container. The hermetically sealed container must be provided with a purifying filter. If the consecutive treatments (thanatopraxy) have been performed within 36 h after the death the body must be encoffined within 6 days. The transport must be done not more than 48 h after encoffining and sealing. The conditions required for long distance international transport outside Europe under the Agreement were: hermetically sealed container; and/or embalming/thanatopractical treatment; and/or refrigeration. In the case of refrigeration at no time shall the temperature inside the container exceed 80 °C during transport.

The Regulation requires two types of documents for carriage of corpses: medical certificate upon death; and a laissez passer. The medical certificate is required to be drawn up, on the one hand, in the language of the country of departure in which the death had occurred and, on the other hand, in one of the following languages: English, German or French. It must contain information relating to the deceased such as: surname and maiden name in the case of a married woman; first name(s); date and place of birth; date and place of death; sex; and cause of death.

4.3.4 ICAO Initiatives

The Council of ICAO, at its Thirty Second Session in 1957 addressed the carriage under the heading "Carriage of Sick Persons, Pregnant Women, Live Animals and Coffins – Sanitation on Board Aircraft" at which IATA recommended that in addition to the prevailing requirement—that human remains be placed in hermetically-sealed coffins which are enclosed in outside cases—human remains should be embalmed prior to being placed in the coffin. IATA further suggested that acceptance of such coffins is dependent upon the type of aircraft, requirements of entry and clearance and prior approval of the countries of origin, transit and destination.[15] The Council noted that comments on the carriage of coffins had been received from twenty seven States (from a total of 72 member States at that time) and two overseas territories. Three of these States reported that they were bound by the provisions of the 1937 Berlin Agreement and Eight States advised ICAO that the carriage of corpses existed in their national legislations. Thirteen States commented that they had not, in their experience encountered serious difficulties in this area. The United States made the comment:

> Because of known effects of rare atmosphere at high altitude on sealed caskets, such caskets should not be carried by aircraft.[16]

[15] C-WP/2448, 5/6/57, Addendum and Corrigendum, 21/11/576 at 3.

[16] *Id*. Paragraph 20.1 at p. 10.

The ICAO Secretariat responded in assent:

> Differences in atmospheric pressure are known to have caused bursting of coffins, particularly when sealed hermetically (by welding) according to provisions of Articles 5 and 7 of the Berlin Arrangement, or similar provisions in national legislation. Prompted by rapid decomposition in flight, such transports occasionally arrive in appalling conditions; in some States (Australia, Philippines, Venezuela, Netherlands Antilles), therefore, it is required that corpses be embalmed prior to air transport, thus eliminating at least certain difficulties. If some pressure-relief system were applied to sealed caskets, the difficulties caused by pressure differences might disappear, but international transport would not have permitted by existing laws.

It is noteworthy that during these discussions, cremated human remains were not mentioned, except by Belgium which said that "incinerated corpses are accepted without any restrictions and are carried on all types of aircraft".[17] The ICAO Council concluded that the difficulties reported by States were caused by variations of atmospheric pressure; a characteristic of transport by air, while for international transport coffins must be hermetically sealed.

ICAO has approached this subject from another dimension *i.e*. the carriage of human remains of an aircraft accident victim. In 2001 the Council released its *Guidance on Assistance to Aircraft Accident Victims and their Families*[18] where ICAO recognizes that in an accident context the identification, custody and return of human remains are very important forms of family assistance but remains are often difficult to recover and identification can be an arduous and time-consuming process. The ICAO guidance goes on to say that legislation often requires a post mortem examination of those killed in an accident and in some instances, there may be remains that cannot be identified.[19] ICAO also calls for personal effects of the deceased to be correctly handled and returned to their lawful owners.[20] The Guidance also calls for the State of occurrence to provide for the return of human remains[21] while also devolving that burden—of the carriage of such remains—upon the aircraft operator involved in the accident.[22]

4.4 Annexes 9 and 18 to the Chicago Convention

There are two Annexes to the Chicago Convention which bear some relevance to the carriage of human remains by air—Annex 9 (Facilitation) and Annex 18 (The Safe Transport of Dangerous Goods by Air). The Annex 9 definition of cargo implies that

[17] C-WP/2448, 5/6/57, *supra* note 15, Appendix "A" at 25.

[18] *Guidance on Assistance to Aircraft Accident Victims and their Families, ICAO Circular 285 – AN/166.*

[19] *Id*. Paragraph 3.10.

[20] *Id*. Paragraph 3.11.

[21] *Id*. Paragraph 5.1.

[22] *Id*. Paragraph 5.7.

human remains could be categorized as cargo by giving the definition of cargo as "*any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage*". This definition is slightly different from the one contained in another ICAO document—*Technical Instructions for the Safe Transport of Dangerous Goods by Air*[23] which defines "cargo" as "*any property carried on an aircraft other than mail and accompanied or mishandled baggage*". Annex 18 does not define the word "cargo" but defines "dangerous goods" as articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those instructions. The Technical Instructions do not list human remains as being dangerous cargo. However, it behooves the international aviation community to inquire, along the lines of ICAO discussions in the Council, whether human remains could be ruled out as not posing a risk to health or the environment under any circumstances of carriage by air or whether human remains, depending on the way it is packed for transport, could be considered as dangerous goods.[24]

Getting back to Annex 9, there is a whole chapter in the Annex—Chapter 4—dedicated to the entry and departure of cargo and other articles. Surprisingly, there is no provision in the Annex for priority of clearance or transport of human remains over other cargo, despite the prominence given to the subject in ICAO *Circular 285 – AN/166.*[25] Another surprise is that, although there is a *Recommended Practice* in the Annex which suggests that electronic information systems for the release and clearance of "goods" (my emphasis) should cover their transfer between air and other modes of transport,[26] there is no definition of "goods" in the Annex. Do corpses or cremated human remains come under the purview of "goods"? This question is valid in the context of Appendix 3 to the Annex which has a template for a cargo manifest where there exists a column for "Nature of Goods". There is no mention of the word "cargo" in this template.

In view of the above discussion it might be worthwhile for a detailed discussion on the status of human remains in the global aviation context and a re-visit of the 1957 discussions in the ICAO Council. The added dimension of related ICAO documentation such as Circular 285 – AN/166 makes it all the more compelling.

[23] ICAO Doc 9284, AN/905 (2011–2012 Edition).

[24] American Airlines requires that human remains packed in dry ice are subject to dangerous goods regulations. https://www.aacargo.com/shipping/humanremains.jhtml.

[25] *Supra*, note 18.

[26] Annex 9 to the Convention on International Civil Aviation, Thirteenth Edition: July 2011, *Recommended Practice* 4.18.

4.5 IATA, WHO and United States Guidelines

The International Air Transport Association has clear, cogent guidance on the carriage by air of human remains. In its *Airport Handling Manual* (AHM) IATA prescribes that for special cargo, such as valuable cargo, perishables, vulnerable cargo, human remains and shipments of special importance or urgency, particular points to be considered are: that all personnel concerned are made fully aware of the nature and handling requirements of all such shipments; suitable arrangements are made for the security of valuable and vulnerable cargo; perishables are handled in accordance with the requirements of the particular commodity and in particular the most recent edition of the Perishable Cargo Regulations Manual; that a check is made to ensure that the final load assembled for dispatch to the aircraft *does* include shipments of special importance or urgency; and that shipments considered as special cargo have "special consignment" labels visibly attached to each package.[27]

The *IATA Ground Operations Manual* (IGOM) provides that human remains should be carried in an aircraft only if accepted by the operating airline for transport. The IGOM requires the carrier to make sure that a Human Remains Acceptance Checklist has been used (if required by the operating airline). Carriers are required, according to the IGOM, not to accept any human remains that are consolidated with any cargo other than other human remains. With regard to cremated human remains the Manual requires that only urns or other suitable containers as cargo with no special restrictions are accepted for carriage and that the carrier should make sure that the urn or other container is packed in a neutral outer pack that will protect the urn from breakage and/spillage.[28] It also prescribes that human remains in coffins should not be stored next to food or live animals, adding that there appears to be no scientific or technical reason why live animals and human remains should be segregated in aircraft cargo compartments, except that it may be ethical for cultural reasons to segregate them.

IATA in AHM 333 states that, should a body fluid leakage occur while transporting dead bodies, the usual accepted guidelines endorsed by WHO for dealing with spilled body fluids should be followed and the handler is advised to: wear disposable gloves and, if available, a plastic apron. If the spillage has occurred on an aircraft, the AHM provision advises the handler to only use cleaning materials suitable for aircraft use. He should not try to clean the body fluids by hosing with water or air and should use material that will adsorb the body fluids and scrape the material into a biohazard bag. Afterwards, he should wash the area with water/disinfectant after removal of the adsorbent material, dispose of gloves and apron in a biohazard bag and wash hands thoroughly with soap and water afterwards.

WHO has also some guidance pertaining to the handling of human remains, and recommends as a fundamental measure that the handling of human remains should be kept to a minimum. Additionally, WHO recommends, particularly in the case of

[27] IATA Airport Handling Manual, AHM 310 at 149.

[28] IATA IGOM, Chapter 3.

deaths caused by infectious diseases that remains should not be sprayed, washed or embalmed and that only trained personnel should handle remains during the outbreak. Personnel handling remains should wear personal protective equipment (gloves, gowns, apron, surgical masks and eye protection) and closed shoes.[29]

In the United States, there are no requirements for importation into the country if human remains consist entirely of: clean, dry bones or bone fragments or human hair; teeth; fingernails or toenails; and human remains that are cremated before entry into the United States. Human remains intended for interment or subsequent cremation after entry into the United States must be accompanied by a death certificate stating the cause of death. If the death certificate is in a language other than English, then it should be accompanied by an English language translation.

If the cause of death was a quarantinable communicable disease (i.e., cholera, diphtheria, infectious tuberculosis, plague, smallpox, yellow fever, viral hemorrhagic fevers, SARS, or pandemic influenza), the remains must meet the applicable standards and may be cleared, released, and authorized for entry into the United States only if: the remains are cremated; or the remains are properly embalmed and placed in a hermetically sealed casket; or the remains are accompanied by a permit issued by the Director of the Centre for Disease Control and Prevention (CDC). The CDC permit (if applicable) must accompany the human remains at all times during shipment. If the cause of death was anything other than a quarantinable communicable disease, then the remains may be cleared, released, and authorized for entry into the United States if: the remains meet the standards for applicable or properly embalmed and placed in a hermetically sealed casket, or are accompanied by a permit issued by the CDC Director); or the remains are shipped in a leak-proof container.

Federal quarantine regulations (42 CFR Part 71) state that the remains of a person who is known or suspected to have died from a quarantinable communicable disease may not be brought into the United States unless the remains are; properly embalmed and placed in a hermetically sealed casket, cremated, or accompanied by a permit issued by the CDC Director. Quarantinable communicable diseases include cholera; diphtheria, infectious tuberculosis; plague; smallpox, yellow fever; viral hemorrhagic fevers (Lassa, Marburg, Ebola, Congo-Crimean, or others not yet isolated or named); severe acute respiratory syndrome (SARS); and influenza caused by novel or re-emergent influenza viruses that are causing or have the potential to cause a pandemic. A CDC permit may be required when the remains are not embalmed or cremated, especially if the person is suspected or known to have died from a communicable disease.

Persons wishing to import human remains, including cremated remains, into the United States must obtain clearance from CDC's Division of Global Migration and Quarantine (DGMQ). Clearance can be obtained by presenting copies of the foreign death certificate and if needed, a CDC/DGMQ permit to the CDC Quarantine Station with jurisdiction for the U.S. port of entry. A CDC/DGMQ permit may be

[29] Interim Infection Control Recommendations for Care of Patients with Suspected or Confirmed Filovirus (Ebola, Marburg) Haemorrhagic Fever, BDP/EPR/WHO, Geneva March 2008.

needed to import human remains if the deceased is known or suspected to have died from a quarantinable communicable disease. A copy of the foreign death certificate and the CDC/DGMQ permit must accompany the human remains at all times during shipment. The foreign death certificate should state the cause of death and must be translated into English.

The basic principle that should apply to the handling of human remains must be consistent with the policy which currently applies in case of aircraft accident investigations, in that the country in which the death occurred must act contemporaneously and in close consultation with the country of nationality. This would obviate the case of the British tourist who died in Greece. The second principle should be that the principles of *ICAO Circular 285 – AN/166* should be incorporated into Annex 9 along with a Standard in Chapter 4 that human remains should be accorded priority and dignity and that specially reduced rates should be promulgated by States on their airlines for this purpose. This Standard should be adopted in accordance with the basic philosophy of Article 44 d) of the Chicago Convention which states that ICAO should strive to meet the needs of the people of the world for safe, regular, efficient and economical air transport.

Annex 9 should contain a separate Appendix for the carriage of human remains by air, which would lay down global principles for the handling, care and commitment that States could ensure. This Appendix should have a cross reference to Annex 18 and the *Technical Instructions* contained in Doc 9284[30] with appropriate linkages that ensure the harmonious application of both Annexes to this sensitive subject.

As for Annex 18, a study should be undertaken to determine as to when a cadaver or cremated remains would, if at all, become a dangerous good. The focus area would be both on the condition the human remains are at the point of acceptance for carriage, and the manner in which they are packaged. In the ultimate analysis, there has to be core global rules in place for this important area of air transportation. It cannot be left for individual States or airlines to decide.

Enhancing global civil aviation security and facilitation is one of ICAO's Strategic Objectives as adopted by the Council in May 2012. This is the first-time facilitation has been mentioned in ICAO's strategic language and it should be a harbinger of new studies and new cooperation with the international community between ICAO and its member States o the carriage by air of human remains.

4.6 Carriage of Live Animals

Airlines have carried live animals since the 1930s culminating in a pets-only airline in 2009.[31] According to IATA, the number of pet shipments increased 3.3% in 2016 as against 2015, although revenue from these shipments fell 2.5%.[32] Animals are

[30] *Supra*, note 28.

[31] See Bomkamp (2009).

[32] Krems (2017). On a regional basis shipments from Latin America region increased 22.4% / rev-

transported either in the cabin (in case of small pets such as cats and dogs); as excess baggage or accompanied baggage and as cargo. Boeing states that "the safe transportation of live animals as air cargo is based on controlling three environmental factors: temperature, relative humidity level, and cargo compartment carbon dioxide (CO_2) concentration. Each type of animal has unique environmental requirements for optimal health. Failure to properly control these environmental factors may have an impact on animal welfare, comfort, and survivability, affecting animal cargo revenue".[33]

In Gluckman v. American Airlines Inc.,[34] The plaintiff sued the defendant American Airlines for emotional distress damages, *inter alia*, suffered as a result of his dog dying of a heatstroke while being transported in the cargo hold of defendant's aircraft where the heat had reached 140 °F—a temperature that was in violation of applicable guidelines. in violation of the airline's cargo hold guidelines. The court held that a value could not be placed on emotional damage caused by loss of companionship and that the plaintiff's only recourse could be the recovery of the value of the pet. The basis of the court's decision was that under the applicable jurisdiction's laws (New York), a cause of action for negligent infliction of emotional distress "arises only in unique circumstances, when a defendant owes a special duty only to plaintiff, or where there is proof of a traumatic event that caused the plaintiff to fear for her own safety."[35]

In the 1987 case of *Deiro* v. *American Airlines*[36] where the Plaintiff-appellant appealed from a district court order granting partial summary judgment for defendant-appellee American Airlines, Inc. The district court held that the Airlines' liability for the death of seven greyhound racing dogs and injuries to two others, caused by heat exposure while the dogs were being transported in the cargo area of a jet on which plaintiff was a passenger, was limited to a total of $750 pursuant to a liability limitation provision in Deiro's passenger ticket. Diero claimed that the dogs were not baggage. the court denied Deiro's cross-motion for partial summary judgment, rejecting his argument that animals are not "baggage" and therefore not subject to American's baggage liability limitation. That ruling was not appealed. Second, the court held as a matter of law that, under Oregon law, Deiro was not entitled to punitive damages. Although this second ruling was appealed, we do not reach it because our decision upholding the $750 liability limitation makes the punitive damages issue moot. The court of first instance ruled that Deiro's cross-motion for partial summary judgment was denied, rejecting his argument that animals are not "baggage" and therefore not subject to American's baggage liability limitation. That ruling was not appealed. Second, the court held as a matter of law that, under

---

enue grew 12.9% YOY § Shipments from Asia Pacific decreased 7.8% / revenue fell 13.5% YOY § Revenue from all other regions was plus or minus 1–3%.

[33] Safe Transport of Live Animal Cargo, Aero: Qtr. 02:12. http://www.boeing.com/commercial/aeromagazine/articles/2012_q2/4/.

[34] 844 F.Supp. (151 S.D.N.Y., 1994).

[35] See also, *Cucchi* v. *New York City Off-Track Betting Corp*., 818 F.Supp. 647, 656 (S.D.N.Y.1993).

[36] 816 F.2d 1360.

Oregon law, Deiro was not entitled to punitive damages. Although this second ruling was appealed, we do not reach it because our decision upholding the $750 liability limitation makes the punitive damages issue moot.

The Court of Appeal affirmed the district court's order and said "we find it difficult to imagine how any passenger with Deiro's experience, planning to check a quarter of a million dollars worth of baggage, could have had more opportunity or incentive to familiarize himself with the baggage liability provisions. We conclude that under the two-pronged reasonable communicativeness test, Deiro is contractually bound by the limitation of liability. We next consider whether American gave Deiro reasonable notice and a full and fair opportunity under the released valuation doctrine to declare a higher value for his baggage and obtain protection in an amount greater than $750".[37]

References

Bomkamp S (2009) All-pet airline hits skies. http://www.heavenlycreatures.ca/blog/?p=470

Krems J (2017) Live animal transport flying high – safeguarding animal safety and welfare. https://www.iata.org/events/wcs/Documents/WCS_2017/Live-Animals-Final.pdf

[37] https://www.casemine.com/judgement/us/59148ca2add7b04934535980.