Global Gateway

Workshop on Dangerous goods

09 – Operator's responsibilities

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EU-ASEAN Sustainable Connectivity Package Aviation Partnership Project (EU-ASEAN SCOPE APP)
This project is funded by the European Union and implemented by the European Union Aviation Safety Agency (EASA)

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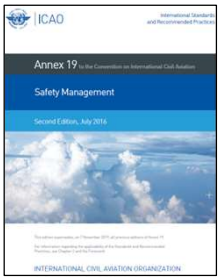
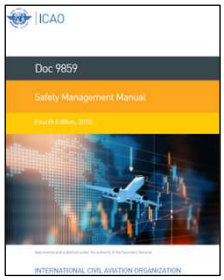
09 – Operator's responsibilities

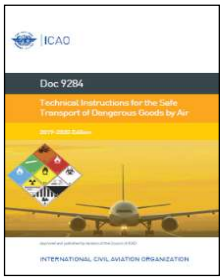
The carriage of dangerous goods is included in the scope of the operator's safety management system (SMS).

Annex 19 (Safety Management) includes safety management provisions for air operators.
Further guidance is contained in the Safety Management Manual (SMM) (Doc 9859).

TIs Part 7 details the responsibilities of operators with regard to the acceptance, handling and loading of dangerous goods.







Operators' subcontractors' agents (incl. airport's ground handling's staff) are subject to the operator's responsibilities of Part 7.

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09 – Operator's responsibilities

1. **Acceptance procedures**
2. **Storage and loading**
3. **Inspection and decontamination**
4. **Provision of information**
5. **Provisions concerning passengers and crew**
6. **Dealing with incident/accident involving DGs**

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09 – Operator's responsibilities
01 – Acceptance procedures

Transport document (DGD)

An operator must not accept for transport aboard an aircraft an article containing dangerous goods unless:

- it is accompanied by two copies** of the dangerous goods transport document* ; or
- the information applicable to the consignment is provided in electronic form***; or
- it is accompanied, where permitted, by alternative documentation.

IATA template

* DGD
>> see TIs part 5 §4
>> se previous presentation

** One copy must accompany the consignment to final destination.
One copy must be retained by the operator until the goods have arrived at final destination.

*** The information must be available to the operator at all times during transport to final destination.

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09 – Operator's responsibilities
01 – Acceptance procedures

Acceptance check

The operator must, by use of a checklist, verify the following:

- the documentation (DGD);
- the quantity of dangerous goods stated on the DGD (within the limits per package);
- where required, the letter in the packaging specification mark designating the packing group;
- marks and labels;
- proper shipping names, UN numbers;
- special handling instructions;
- respect of the segregation;
- no leak and no indication that the package/overpack/ULD integrity has been compromised.

The operator must be able to identify the person who performed the acceptance check.

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09 – Operator's responsibilities

01 – Acceptance procedures

Checklists

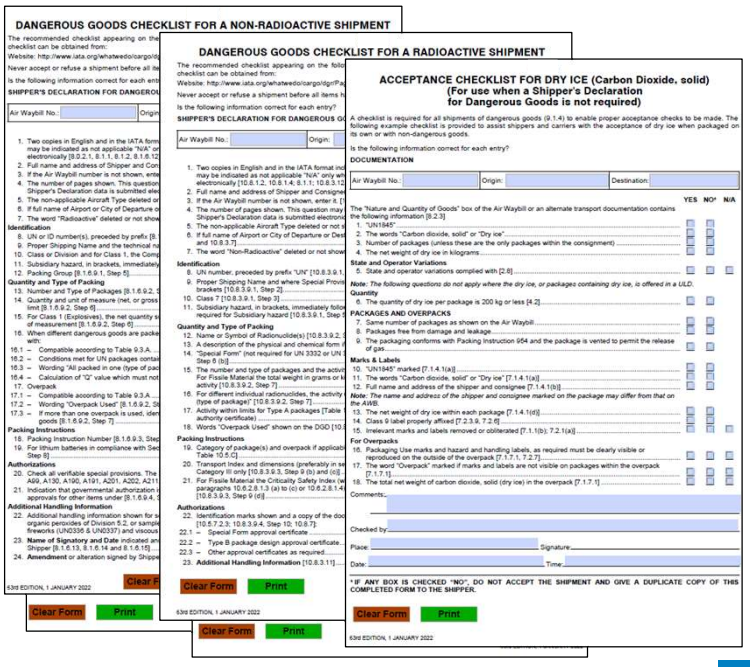
IATA provides 3 different types of C/L :

1) Non-radioactive

2) Radioactive

3) Dry ice

Operators should be encouraged to develop their own (reduced and adapted) checklists



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09 – Operator's responsibilities

01 – Acceptance procedures

Example of customised acceptance C/L:

CHECK-LIST ACCEPTATION

Items à vérifier	Conforme	Non conforme
Documents joints à l'expédition (sauf transport interne Compagnie) :		
Lettre de Transport Aérien (LTA) en double exemplaire dont une jointe aux colis et une restant au sol		
Déclaration de l'expéditeur de Marchandises Dangereuses en double exemplaire dont une jointe aux colis et une restant au sol		
Vérification que les MD sont autorisées au transport par la Compagnie		
Vérification de(s) valeur(s) Q mentionnée(s) sur la DGD		
Expédition :		
Les quantités sont conformes avec les indications de la déclaration de l'expéditeur et dans la limite fixée par la réglementation (nombre de colis, quantité par colis, ...)		
L'emballage ne contient pas différents types de Marchandises Dangereuses qui devraient être séparées		
Emballage :		
Les emballages sont conformes aux spécifications et en adéquation avec les marchandises dangereuses qui sont à l'intérieur		
L'intégrité de l'emballage n'est pas compromise et ne présente pas de fuite		
Les dates de péremption des emballages plastiques ne sont pas dépassés		
Les colis comportent tous les marquages et les étiquetages nécessaires, en conformité avec les marchandises transportées		
En cas de refus, expliquer la cause :		

En cas de refus, le dossier complet (présente check-list, LTA, Déclaration de l'expéditeur, éventuellement photos si nécessaire) doit être archivés pendant 3 mois minimum.

Visa	
Nom de l'acceptant :	Date :
Visa de l'acceptant :	

Une copie de cette déclaration doit être transmise au CDD

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09 – Operator's responsibilities
02 – Storage and loading

Securing dangerous goods

Dangerous goods must be secured in the aircraft in a manner that will prevent any movement.

For packages or overpacks containing radioactive material, the securing must be adequate to ensure that the separation requirements are met at all times (see further in this chapter).

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09 – Operator's responsibilities
02 – Storage and loading

Loading of CAO packages

Packages or overpacks of dangerous goods bearing the "Cargo aircraft only" label must be loaded in accordance with one of the following provisions:

- in a Class "C" aircraft cargo compartment or in a Class "C" ULD;

§1.1 Cargo compartment classification (A>E)
The classification depends on:
- the location in the aircraft;
- the ventilation and fire/smoke detection capabilities;
- the extinguishing capabilities.

- Class A and Class B are cargo compartments accessible to a crew member;
- Class C and Class D are cargo compartments not accessible to a crew member;
- Class E are cargo compartments on aeroplanes used only for the carriage of cargo.

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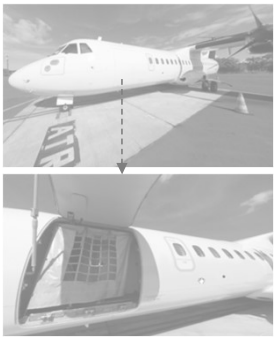
09 – Operator's responsibilities
02 – Storage and loading

Loading of CAO packages

Packages or overpacks of dangerous goods bearing the "Cargo aircraft only" label must be loaded in accordance with one of the following provisions:

- in a Class "C" aircraft cargo compartment or in a Class "C" ULD;

Class E



Class B

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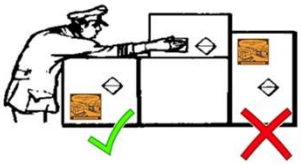
09 – Operator's responsibilities
02 – Storage and loading

Loading of CAO packages

Packages or overpacks of dangerous goods bearing the "Cargo aircraft only" label must be loaded in accordance with one of the following provisions:

- in a Class "C" aircraft cargo compartment or in a Class "C" ULD;
- in such a manner that in the event of an emergency an authorized person can access those packages or overpacks, and can handle and, where size and mass permit, separate such packages or overpacks from other cargo
  (this requirement doesn't apply to certain DGs: Part 7, §2.4.1.2);
- external carriage by a helicopter, e.g.;
- for helicopter operations, in the cabin (with the approval of the State of the Operator) >> but with no passenger on-board.



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09 – Operator's responsibilities
02 – Storage and loading

Segregation

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.

As a minimum, the segregation scheme shown in Table 7-1 must be followed in order to maintain acceptable segregation:

The scheme applies irrespective of whether the hazard is the primary or subsidiary hazard.

Operators may implement their own segregation table (which can only be more restrictive).

Table 7-1. Segregation between packages

	Class or division										
Hazard label	*1*	*2.1*	*2.2, 2.3*	*3*	*4.1*	*4.2*	*4.3*	*5.1*	*5.2*	*8*	*9 see 2.2.1.2*
1	Note 1	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2
2.1	Note 2	—	—	—	—	—	—	—	—	—	x
2.2, 2.3	Note 2	—	—	—	—	—	—	—	—	—	—
3	Note 2	—	—	—	—	—	—	x	—	—	x
4.1	Note 2	—	—	—	—	—	—	—	—	—	x
4.2	Note 2	—	—	—	—	—	—	x	—	—	—
4.3	Note 2	—	—	—	—	—	—	—	—	x	—
5.1	Note 2	—	—	x	—	x	—	—	—	—	x
5.2	Note 2	—	—	—	—	—	—	—	—	—	—
8	Note 2	—	—	—	—	—	x	—	—	—	—
9 see 2.2.1.2	Note 2	x	—	x	x	—	—	x	—	—	—

An "x" at the intersection of a row and column indicates that packages containing these classes of dangerous goods may not be stowed next to or in contact with each other, or in a position which would allow interaction in the event of leakage of the contents. Thus, a package containing Class 3 dangerous goods may not be stowed next to or in contact with a package containing Division 5.1 dangerous goods.

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09 – Operator's responsibilities
02 – Storage and loading

Segregation (explosive substances and articles)

Table 7-2. Separation of explosive substances and articles

Division and compatibility group	1.3C	1.3G	1.4B	1.4C	1.4D	1.4E	1.4G	1.4S
1.3C			x					
1.3G			x					
1.4B	x	x		x	x	x	x	
1.4C			x					
1.4D			x					
1.4E			x					
1.4G			x					

sives of these divisions and compatibility groups must be aircraft, the unit load devices must be separated by other n a unit load device, these explosives must be loaded into go with a minimum separation distance of 2 m.

Table S-7-1. Separation of explosive substances and articles

Compatibility group	A	B	C	D	E	F	G	H	J	K	L	N	S
A		x	x	x	x	x	x	x	x	x	x	x	x
B	x		x	x	x	x	x	x	x	x	x	x	
C	x	x				x	x	x	x	x	x	x	
D	x	x				x	x	x	x	x	x	x	
E	x	x				x	x	x	x	x	x	x	
F	x	x	x	x	x		x	x	x	x	x	x	
G	x	x	x	x	x	x		x	x	x	x	x	
H	x	x	x	x	x	x	x		x	x	x	x	
J	x	x	x	x	x	x	x	x		x	x	x	
K	x	x	x	x	x	x	x	x	x		x	x	
L	x	x	x	x	x	x	x	x	x	x	1)	x	x
N	x	x	x	x	x	x	x	x	x	x	x		
S	x										x		

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09 – Operator's responsibilities
02 – Storage and loading

Separation (radioactive material)

Packages, overpacks and containers must be separated from passengers and crew.

The separation depends on the total transport index (for II-RRY & III-RRY)

Conditions		
Transport index	*Maximum radiation level at any point on external surface*	*Category*
0*	Not more than 0.005 mSv/h	I-WHITE
More than 0 but not more than 1*	More than 0.005 mSv/h but not more than 0.5 mSv/h	II-YELLOW
More than 1 but not more than 10	More than 0.5 mSv/h but not more than 2 mSv/h	III-YELLOW
More than 10	More than 2 mSv/h but not more than 10 mSv/h	III-YELLOW**

The table 7-3 provides the minimum distance from surfaces in PAX a/c
(0,1 ≤ TI ≤ 50)
The table 7-4 provides the minimum distance from surfaces in CAO a/c
(50,1 ≤ TI ≤ 300)

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09 – Operator's responsibilities
02 – Storage and loading

Separation (radioactive material)

Table 7-3. Minimum distance from surface of packages, overpacks and freight containers of radioactive material to the nearest inside surface of passenger cabin or flight deck partitions or floors, irrespective of carriage duration

Total sum of transport indexes	*Minimum distance (metres)*	*Total sum of transport indexes*	*Minimum distance (metres)*
0.1 – 1.0	0.30		
1.1 – 2.0	0.50		
2.1 – 3.0	0.70		
3.1 – 4.0	0.85		
4.1 – 5.0	1.00		
5.1 – 6.0	1.15		
6.1 – 7.0	1.30		
7.1 – 8.0	1.45		
8.1 – 9.0	1.55		
9.1 – 10.0	1.65		
10.1 – 11.0	1.75		
11.1 – 12.0	1.85		
12.1 – 13.0	1.95		

Table 7-4. Minimum distance from surface of packages, overpacks and freight containers of radioactive material, carried by cargo aircraft only, to the nearest inside surface of the flight deck partitions or floor, or other areas occupied by personnel, irrespective of carriage duration

Total sum of transport indexes	*Minimum distance (metres)*	*Total sum of transport indexes*	*Minimum distance (metres)*
50.1 – 60.0	4.65	180.1 – 190.0	8.55
60.1 – 70.0	5.05	190.1 – 200.0	8.75
70.1 – 80.0	5.45	200.1 – 210.0	9.00
80.1 – 90.0	5.80	210.1 – 220.0	9.20
90.1 – 100.0	6.10	220.1 – 230.0	9.40
100.1 – 110.0	6.45	230.1 – 240.0	9.65
110.1 – 120.0	6.70	240.1 – 250.0	9.85
120.1 – 130.0	7.00	250.1 – 260.0	10.05
130.1 – 140.0	7.30	260.1 – 270.0	10.25
140.1 – 150.0	7.55	270.1 – 280.0	10.40
150.1 – 160.0	7.80	280.1 – 290.0	10.60
160.1 – 170.0	8.05	290.1 – 300.0	10.80

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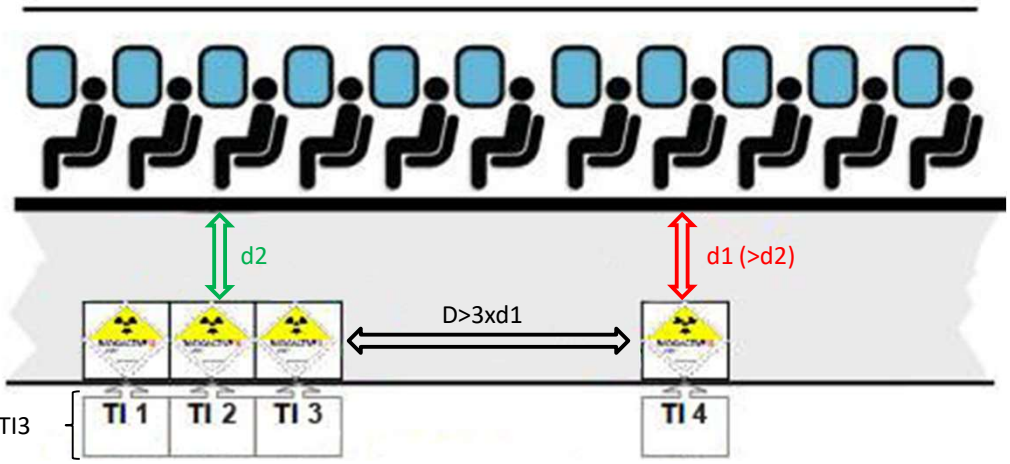
09 – Operator's responsibilities
02 – Storage and loading

Separation (radioactive material)

Method for calculating the minimum distance:



TI=TI1+TI2+TI3

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09 – Operator's responsibilities
02 – Storage and loading

Separation (other cases)

UN2807 – Magnetized material
They must be loaded so that headings of aircraft compasses are maintained.
Several packages can have a cumulative effect.
>> See Packing Instruction 953

UN1845 – Dry ice
When shipped by itself or when used as a refrigerant for other commodities, dry ice may be carried provided the operator has made suitable arrangements dependent on the a/c type, the aircraft ventilation rates, the method of packing and stowing, whether animals will be carried on the same flight, and other factors.

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09 – Operator's responsibilities
03 – Inspection and decontamination

Inspection

Packages or overpacks containing dangerous goods must be inspected for signs of damage or leakage upon unloading from the aircraft or unit load device.

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.

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09 – Operator's responsibilities
03 – Inspection and decontamination

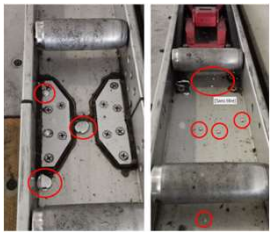
Damaged packages

Where any package of dangerous goods loaded on an aircraft appears to be damaged or leaking, the operator must remove such package from the aircraft.

If evidence of damage or leakage is found, the position where the dangerous goods was stowed must be inspected for damage or contamination and any hazardous contamination removed.

The operator must ensure the remainder of the consignment is in a proper condition for transport by air and that no other package, baggage or cargo has been contaminated.





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09 – Operator's responsibilities

04 – Provision of information

To the crew (NOTOC)

As early as practicable before departure of the aircraft, but in no case later than when the aircraft moves under its own power, the operator of an aircraft in which dangerous goods are to be carried must:

- provide the pilot-in-command with accurate and legible written or printed information concerning dangerous goods that are to be carried as cargo;
- provide the same information to the personnel with responsibilities for operational control of the aircraft (e.g. the flight operations officer, flight dispatcher, etc.).

>> the procedures related to these two requirements is to be described in the Operating Manual.

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09 – Operator's responsibilities
04 – Provision of information

To the crew (NOTOC)

The information provided to the pilot-in-command must be readily available to the pilot-in-command during flight.

It should be presented on a dedicated form and should not be by means of air waybills, dangerous goods transport documents, invoices, etc.


NOTIFICATION TO CAPTAIN (NOTOC)

In addition to the languages which may be required by the State of the Operator, English should be used for the information provided to the PIC.

For helicopter operations:

When it is impractical to produce written or printed information or on a dedicated form, this information may be abbreviated or be by other means (e.g. radio communication, as part of the working flight documentation, etc.).
>> with the approval of the State of the Operator

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09 – Operator's responsibilities
04 – Provision of information

To the crew (NOTOC)

The information must include:

Station of Loading	Flight Number	Date	Aircraft Registration	Prepared by									
DANGEROUS GOODS				Emergency contact Name and phone number									
Station of Unload	Air Waybill Number	Proper Shipping Name	Class or Div. for Class 1 compart. Grp.	UN or ID Number	Sub Risk	DRILL CODE	Number of Packages	Net. Qtty or Tra. Index. per Pack.	Radioactive Mat. Categ.	UN Packing Group	IMP Code	CAO	Loaded: ULD ID / POSITION
≠	when issued			"UNxxxx" "IDxxxx"				or gross mass if applicable					
OTHER SPECIAL LOAD													
Stat. of Unload	Air Waybill Number	Contents and Description	Number of Packages	Quantity		Supplementary Information					Code		Loaded: ULD ID / POSITION
Loading Supervisor's Signature	Captain's Signature :	Other information											

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09 – Operator's responsibilities
04 – Provision of information

To the crew (NOTOC)

Some dangerous goods don't need to appear on the information provided to the pilot-in-command.

TIs table 7-9:

UN Number	*Item*	*Reference*
n/a	Dangerous goods packed in excepted quantities	3;5.1.1
UN 2807	**Magnetized material** with field strengths causing a compass deflection of not more than 2 degrees at a distance of 4.6 m	Packing Instruction 953
UN 2908	**Radioactive material, excepted package — empty packaging**	1;6.1.5.1 a)
UN 2909	**Radioactive material, excepted package — articles manufactured from natural uranium** or **depleted uranium** or **natural thorium**	1;6.1.5.1 a)
UN 2910	**Radioactive material, excepted package — limited quantity of material**	1;6.1.5.1 a)
UN 2911	**Radioactive material, excepted package — instruments** or **articles**	1;6.1.5.1 a)
UN 3090	**Lithium metal batteries** (including lithium alloy batteries) when meeting the requirements of Packing Instruction 968, Section II	Packing Instruction 968, Section II
UN 3091	**Lithium metal batteries contained in equipment** (including lithium alloy batteries) when meeting the requirements of Packing Instruction 970, Section II	Packing Instruction 970, Section II
UN 3091	**Lithium metal batteries packed with equipment** (including lithium alloy batteries) when meeting the requirements of Packing Instruction 969, Section II	Packing Instruction 969, Section II
UN 3245	**Genetically modified micro-organisms**	Packing Instruction 959
UN 3245	**Genetically modified organisms**	Packing Instruction 959
UN 3373	**Biological substance, Category B**	Packing Instruction 650, sub-paragraph 11
UN 3480	**Lithium ion batteries** (including lithium ion polymer batteries) when meeting the requirements of Packing Instruction 965, Section II	Packing Instruction 965, Section II
UN 3481	**Lithium ion batteries contained in equipment** (including lithium ion polymer batteries) when meeting the requirements of Packing Instruction 967, Section II	Packing Instruction 967, Section II
UN 3481	**Lithium ion batteries packed with equipment** (including lithium ion polymer batteries) when meeting the requirements of Packing Instruction 966, Section II	Packing Instruction 966, Section II

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09 – Operator's responsibilities
04 – Provision of information

To the employees

Procedures

An operator must provide such information in the operations manual (A9) and/or other appropriate manuals as will enable flight crews and other employees to carry out the functions for which they are responsible with regard to the transport of dangerous goods.

This information must include instructions as to the action to be taken in the event of emergencies involving dangerous goods.
These instructions must be readily available to the pilot-in-command during flight.

= possible mean

It is only a guidance

>> see the last chapter of this module

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09 – Operator's responsibilities
04 – Provision of information

To the employees

Procedures

With the aim of preventing undeclared dangerous goods from being loaded on an aircraft and of preventing passengers from taking on board those dangerous goods which they are not permitted to have in their baggage (see Table 8-1), the operator must also provide:

- general descriptions that are often used for items which may contain dangerous goods;
- other indications that dangerous goods may be present (e.g. DG labels/markings, GHS labels, etc.);
- those dangerous goods which may be carried by passengers in accordance with Table 8-1…

…and be readily available to staff from:

- cargo reservations and sales;
- cargo acceptance;
- passenger reservations and sales;
- passenger check-in.

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09 – Operator's responsibilities
04 – Provision of information

To the employees

In the cargo acceptance areas

An operator or the operator's handling agent must ensure that notices giving information about the transport of dangerous goods are at the cargo acceptance and

- sufficient in number;
- prominently displayed;
- and provided at a visible location(s) points.

They aim at alerting shippers/agents about any dangerous goods that may be contained in their cargo consignment(s).

These notices must include visual examples of dangerous goods, including batteries.

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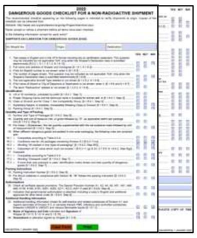
09 – Operator's responsibilities

04 – Provision of information

Retention of documents or information

The operator must ensure that at least one copy of the documents or information appropriate to the transport by air of a consignment of DGs is retained for a minimum period of three months after the flight (or after the non-acceptance).

- dangerous goods transport documents (DGD);
- acceptance checklists;
- the identification of the person who performed the acceptance check;
- written information to the pilot-in-command (NOTOC).



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09 – Operator's responsibilities

05 – Provisions concerning passengers and crew

TIs part 7 §5

Operators must inform passengers about dangerous goods that passengers are forbidden to transport aboard an aircraft.

- at the point of ticket purchase (or if this is not practical, prior to boarding pass issuance);

AND

- at boarding pass issuance (or when no boarding pass is issued, prior to boarding the aircraft).




>> The notification system must be described in the operations manual and/or other appropriate manuals.

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06 – Dealing with incident/accident involving DGs

Doc 9481

Reminder:

= possible mean

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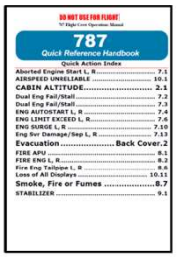
ER Guidebook

OM (part A9)

Check-lists



These instructions must be readily available to the pilot-in-command during flight.

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09 – Operator's responsibilities

06 – Dealing with incident/accident involving DGs

Amplified procedures for dangerous goods incidents

Step	Action
1.	**FOLLOW THE APPROPRIATE AIRCRAFT EMERGENCY PROCEDURES FOR FIRE OR SMOKE REMOVAL** (self-explanatory)
2.	**NO SMOKING SIGN ON** A smoking ban should be introduced when fumes or vapours are present and be continued for the remainder of the flight.
3.	**CONSIDER LANDING AS SOON AS POSSIBLE** Because of the difficulties and possibly disastrous consequences of any dangerous goods incident, corr decision to land at t than late, when an i restricting operation
4.	**CONSIDER TURNI** As the incident may be affected by any damage electric sys only to those instru of the aircraft. Do n
5.	**DETERMINE SOUI** The source of any s firefighting or conta of the incident is ide
6.	**FOR DANGEROUS** **SEE CABIN CREW** **COCKPIT / CABIN** Incidents in the pas appropriate proced coordinate their acti and intentions.

Step	Action
7.	**DETERMINE EMERGENCY RESPONSE DRILL CODE** When the item has been identified, the corresponding entry on the pilot-in-command's dangerous goods notification form should be found. The applicable emergency response drill code may be given on the notification form, or if not given, can be found by noting the proper shipping name or the UN number on the notification form and using the alphabetical or numerical list of dangerous goods. If the item causing the incident is not listed on the notification form, an attempt should be made to determine the name or the nature of the substance. The alphabetical list can then be used to determine the emergency response drill code. *Note.— The alphabetical and numerical lists referred to are those in Section 4 of this document.*
8.	**USE GUIDANCE FROM AIRCRAFT EMERGENCY RESPONSE DRILLS CHART TO HELP DEAL WITH INCIDENT** The drill code assigned to an item of dangerous goods consists of a number plus one or two letters. Referring to the chart of emergency response drills, each drill number corresponds to a line of information concerning the hazard posed by that substance and guidance on the preferable action that should be taken. The drill letter is shown separately on the drill chart; it indicates other possible hazards of the substance. In some cases, the guidance given by the drill number may be further refined by the information given by the drill letter.
9.	**IF THE SITUATION PERMITS, NOTIFY ATC OF THE DANGEROUS GOODS BEING CARRIED** If an in-flight emergency occurs and the situation permits, the pilot-in-command should inform the appropriate air traffic services unit of the dangerous goods on board the aircraft. Wherever possible this information should include the proper shipping name and/or UN number, the class/division and for Class 1 the compatibility group, any identified subsidiary hazard(s), the quantity and the location on board the aircraft. When it is not considered possible to include all the information, those parts thought most relevant in the circumstances should be given.

Table 4-1. Aircraft Emergency Response Drills

1. COMPLETE APPROPRIATE AIRCRAFT EMERGENCY PROCEDURES.
2. CONSIDER LANDING AS SOON AS PRACTICABLE.
3. USE DRILL FROM THE CHART BELOW.

DRILL NO.	INHERENT HAZARD	HAZARD TO AIRCRAFT	HAZARD TO OCCUPANTS	SPILL OR LEAK PROCEDURE	FIREFIGHTING PROCEDURE	ADDITIONAL CONSIDERATIONS
1	Explosion may cause structural failure	Fire and/or explosion	As indicated by the drill letter(s)	Use 100% oxygen; no smoking	All agents according to availability; use standard fire procedure	Possible abrupt loss of pressurization
2	Gas, non-flammable, pressure may create hazard in fire	Minimal	As indicated by the drill letter(s)	Use 100% oxygen; establish and maintain maximum ventilation for "A", "C" or "D" drill	All agents according to availability; use standard fire procedure	Possible abrupt loss of pressurization
3	Flammable liquid or solid	Fire and explosio				
4	Spontaneously combustible or pyrophoric when exposed to air	Fire and explosio				
5	Oxidizer, may ignite other materials, may explode in heat of a fire	Fire and explosio possible corrosio damage				
6	Toxic*, may be fatal if inhaled, ingested, or absorbed by skin	Contains with loss liquid or				
7	Radiation from broken/unshielded packages	Contains with spill radioacti material				
8	Corrosive, fumes disabling if inhaled or in contact with skin	Possible corrosio damage				

DRILL NO.	INHERENT HAZARD	HAZARD TO AIRCRAFT	HAZARD TO OCCUPANTS	SPILL OR LEAK PROCEDURE	FIREFIGHTING PROCEDURE	ADDITIONAL CONSIDERATIONS
9	No general inherent hazard		As indicated by the drill letter	Use 100% oxygen; establish and maintain maximum ventilation if "A" drill letter	All agents according to availability	None
10	Gas, flammable, high fire risk if any ignition source present	Fire and/or explosion	Smoke, fumes and heat, and as indicated by the drill letter	Use 100% oxygen; establish and maintain maximum ventilation; no smoking; minimum electrica	All agents according to availability	Possible abrupt loss of pressurization
11	Infectious substances may affect humans or animals if inhaled, ingested or absorbed through the mucous membrane or an open wound	Contamination with infectious substances	Delayed infection to humans or animals	Do not touch. Minimum re-circulation and ventilation in affected area	All agents according to availability. No water on "I" drill letter	Call for a qualified person to meet the aircraft
12	Fire, heat, smoke, toxic and flammable vapour	Fire and/or explosion	Smoke, fumes, heat	Use 100% oxygen; establish and maintain maximum ventilation	All agents according to availability. Use water if available	Possible abrupt loss of pressurization; consider landing immediately

DRILL LETTER	ADDITIONAL HAZARD	DRILL LETTER	ADDITIONAL HAZARD
A	ANAESTHETIC	S	SPONTANEOUSLY COMBUSTIBLE OR PYROPHORIC
C	CORROSIVE	W	IF WET GIVES OFF TOXIC* OR FLAMMABLE GAS
E	EXPLOSIVE	X	OXIDIZER
F	FLAMMABLE	Y	DEPENDING ON THE TYPE OF INFECTIOUS SUBSTANCE, THE APPROPRIATE NATIONAL AUTHORITY MAY BE REQUIRED TO QUARANTINE INDIVIDUALS, ANIMALS, CARGO AND THE AIRCRAFT
H	HIGHLY IGNITABLE	Z	AIRCRAFT CARGO FIRE SUPPRESSION SYSTEM MAY NOT EXTINGUISH OR CONTAIN THE FIRE; CONSIDER LANDING IMMEDIATELY
I	IRRITANT / TEAR PRODUCING		
L	OTHER HAZARD LOW OR NONE		
M	MAGNETIC		
N	NOXIOUS		
P	TOXIC* (POISON)		

* Toxic has the same meaning as poison.

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09 – Operator's responsibilities
06 – Dealing with incident/accident involving DGs

Reporting of DG accidents, incidents and occurrences

Cases to be considered:

- any dangerous goods accidents or incidents;
- dangerous goods discovered to have been carried when not loaded, segregated, separated or secured in accordance with TIs;
- dangerous goods discovered to have been carried without information having been provided to the pilot-in-command;
- the discovery of undeclared or misdeclared dangerous goods in cargo or mail;
- the finding of dangerous goods carried by passengers or crew members, or in their baggage, when not in accordance with Part 8 of the technical instructions.

>> Provisions to be described in the operations manual and/or other appropriate manuals.

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09 – Operator's responsibilities
06 – Dealing with incident/accident involving DGs

Reporting of DG accidents, incidents and occurrences >> to whom?

Accidents and incidents
>> to the appropriate authorities of the State of the Operator and the State in which the accident or incident occurred

Undeclared or misdeclared DG
>> to the appropriate authorities of the State of the Operator and the State in which this occurred

Other occurrences
DG carried but not loaded, segregated, separated or secured in accordance with TIs
DG carried without information having been provided to the pilot-in-command in accordance with TIs
>> to the appropriate authority of the State of the Operator

>> Provisions to be described in the operations manual and/or other appropriate manuals.

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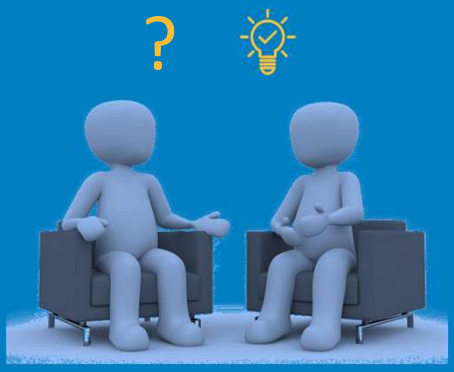
Global Gateway

09 – Operator's responsibilities

Thank you for your attention



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