

Dangerous Goods Training Course Assessment

Syllabus Compliance Statement

--- Operator / Training Course Provider to provide reference in green column and response in the blue column only, where required ---

<u>Course Details:</u> eg. <Name of Course> - <Insert applicable Groups>

1.0 - Dangerous Goods Syllabus of Training – Approved Courses

Syllabus Item #	Syllabus Item **	Expansion of Syllabus Items	Course reference	General Comments	Recommended action	Training C Amendme (include slide information
1	The Act and Regulations with emphasis on the relationship between CASRs and ICAO/IATA and Statement of Contents provisions of CASR 92.070 and CASR 92.075	All groups - Provide an overview of the international regulatory framework of ICAO and IATA. This should stem from the UN and International Atomic Energy Agency (IAEA) and lead into a discussion of the Australian Civil Aviation Act ("the Act") and Regulations (Part 92). Students need to understand the interrelationship between ICAO/IATA and CASA. Training needs to include coverage of the Act (sections 23, 23A, 23B and 29); Part 92 and the penalties that apply. The definition of "strict liability" should be included. Training requirements must be made known (e.g.: Regulatory requirement and what level of training is being given to these employees and how often). Statement of contents covered in both the Act and Part 92. Pertinent Regulations should be discussed as they relate to an operation i.e.: requirement for DG manual - Regulations 92.040, 92.045 and 92.055 and reporting of Incidents 92.065 are only a small example of what should be highlighted from the Regulations. All employees should be aware of the compliance aspects and that responsibility to comply not only rests with the operator but with individual as well. Statement of contents . covered in both the Act and Part 92. Should cover the requirements for a description of contents, a signature (or equivalent) and/or declaration and the impact of penalties should the signature/declaration be absent when hidden DG is discovered.				
2	Dangerous goods manual: purpose, contents and Distribution	Groups A-D inclusive - This is intended to cover the requirements relating to a DG manual rather than the specific content. Operator's employees - Regulation 92.055 requires that operators take steps to ensure employees are made aware of the content of the operator's DG manual relevant to their duties before the employee first performs those duties. There are a number of areas where the procedures of the operator may need to be made specific. These could be in relation to company policies, passenger baggage where there are references to "operator approval", certain classes of DG that are not to stowed in certain lockers or holds, actions in the event of an inflight emergency, reporting of DG accidents and incidents and reporting of undeclared DG. It is recommended that operator-specific courses be tailored to address these areas.				

Course Provider ents / Comments de reference where on has been added)	Satisfactory
	□ Yes □ No
	□ Yes □ No



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3	Kinds of cargo/passenger baggage likely to be DG	All employees - Approximately 95% of all DG incidents relate to undeclared DG in cargo and forbidden items in passengers bags. Training should include information on hidden hazards and what may be found under general descriptions. This would pick up the usual suspects (surfboards, toolboxes etc).				
4	Methods used to identify cargo which could be DG	Group A and B employees - Training in this item should emphasise the five senses in identifying hidden or mis-declared DG with common representative examples based on experience. It should also cover sourcing manufacturer's data through 1800 numbers, the internet and obtaining MSDSs; boxes with old labels; strange smells; content description not matching the feel of the box; usage of UN Specification packaging for general cargo; etc. <i>Note: this item and classification (item 14) are crucial</i> <i>in equipping the employee to detect and identify</i> <i>potential hidden and mis-declared</i> <i>DG</i> .				
5	Risk to aircraft and occupants associated with each of the nine classes of DG	All employees - Training should highlight that the classes of DG indicate their potential for injury and damage. This should include information on the risks to health, safety, property and the environment should there be an incident involving one of the nine classes and pertinent divisions of DG. For specific class shipper courses – this need only be limited to the relevant hazard class/division.				
6	General philosophy on carriage of DG	All employees - When giving students an overview of the general philosophy on transporting DG by air the basic principles that minimise risk should be highlighted. These are; identification of items and substances according to risk, restricting and forbidding some items from air travel, packing and packaging requirements and quantity control, marking and labelling, loading and stowage restrictions, documentation, emergency procedures, reporting of incidents and accidents, and relevant training.				
7	DG forbidden under any circumstance	Group A, B, C and F employees - Depending on their hazard, DG are: (a) forbidden under any circumstances; (b) forbidden on both passenger and cargo aircraft but can be carried in exceptional circumstances subject to Exemption or Approval by the States concerned; (c) forbidden on passenger aircraft but permitted on cargo aircraft; and/or (d) permitted on both passenger and cargo aircraft. The training should explain the various degrees to which some DG are forbidden; where listings may be found and how State(s) approval(s) can be sought.				
8	a. General applicability b. General transport requirements	All employees - The detailed requirements for the transport of DG by air are found in the TIs. There are a few exceptions, which should be noted. The transport requirements are also outlined in the TIs and must be adhered to. This is amplified at IATA 1.2.1 and 1.2.6.				

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9	DG of the operator	Groups A, B, C and D for operators and GHAs only - A number of airworthiness and operational items are DG e.g.: chemical oxygen generators, escape slides/rafts, batteries etc, but when fitted to the aircraft are not subject to the requirements of the TIs and Part 92. Some DG is allowed to be carried for catering or cabin service supplies. The training should cover that replacement items and those removed for replacement need to be consigned as DG.				
10	DG in air mail	Groups A, B and C - The conventions of the UPU apply to International mail. The ICAO TIs prohibit DG other than certain Infectious Substances (UN 3373) which may be packed in dry ice, and very low activity radioactive material, in airmail. Operators need to have procedures for carrying mail containing such DG. Some countries have imposed exclusions on these DG being in their airmail. Training should explain the requirements and what action to take if it is suspected that airmail contains prohibited DG. Australia Post could carry other dangerous goods domestically in their airmail; however, this would be subject to all the usual provisions of the ICAO TIs. Likewise Australia Post is also able to convey DG, in certain circumstances, via other modes of transport.				
11	DG in excepted quantities	Employees of Groups A and F - Provisions exist for very small quantities of DG to be shipped without meeting all the requirements of the regulations. Cover in detail. Should mention that DG in excepted quantity is not permitted as checked or carry-on baggage, nor in airmail. They may only go as cargo. For Groups B and C - An overview of the specific requirements should be given.				
12	DG in limited quantities	 Employees of Groups A and F - Provision exists for small amounts of DG to be packed in non-specification packaging. For Group C employees - An overview of the requirements should be given. Note: Many students fail to understand the differing requirements of excepted and limited quantities. 				
13	Definitions	All employees - Definitions of commonly used terms from a DG perspective. A number of relevant definitions such as 'Dangerous Goods", "Dangerous Goods Accident" and Dangerous Goods Incident", Passenger aircraft", Cargo aircraft", "Batteries", etc should be given to aid understanding of the relevant requirements.				
14	Classification of DG	 All employees - Employees need to appreciate the different types of DG and how they are classified, to assist in recognising them if they are found in cargo and /or baggage. For Group A and F – this Lesson requires an in-depth coverage of all classes and hazard divisions. Students should also be able to deal with a variety of differing characteristics including mixtures and solutions, precedence of hazards, NOS determination, packing group criteria etc. Note – Many courses fail to provide adequate coverage of classes 1 and 7 – particularly, excepted packages, activity limits, types of radioactive 				

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		 materials (i.e. LSA, Special Form) and determining the Transport Index. For Groups B and C - Training for the acceptance of non-DG need not cover the detailed criteria, but should be sufficient to determine whether an item is classified as dangerous or not. i.e. the student should be able to determine that a compressed cylinder of Nitrogen at 180 kPa at 20°C is not dangerous or that a liquid with a flashpoint of 24°C is class 3 but need not know the packing group. Note: Presenting examples of genuine, inaccurate MSDSs will convey the importance of classification as a tool in screening out hidden DG. 				
15	The dangerous goods list: a. information provided in the list; b. abbreviations used; c. n.o.s. entries "not otherwise specified".	Groups A, B, C and F – Coverage of the various columns in the list and how they are interpreted is required. Coverage of the abbreviations used and reference to the legend is required. Coverage of Special Provisions is required to give employees an understanding that there may be occasions when prohibited DG may travel on aircraft. Courses also need to cover Packing Groups and associated indication of danger as well as distinction in numbering between radioactive and non-radioactive DG. Note: Especially relevant to flight crew are the Proper Shipping Names and Emergency Response Code. Also need to clearly address for flight crew that nos* goods must have the technical name on the Notice to Captain (NOTOC).				
16	Packing instructions including general packing requirements (For Group F employee = relevant to classes consigned)	Groups A and F - Coverage of Limited Quantity, inner, outer and combination packaging. Difference between package, packaging and packing. Reference to State and operator variations. Determination and application of Q values and compatibility when put different DG in one package. Acceptance level and full shipper courses should cover a representative sample of characteristic hazards and classes and associated packaging through both the course work and exam i.e. Class 2, a liquid (3 or 8), a toxic or class 5, a class 7, a couple of class 9s, passenger or cargo aircraft only, single and combination packaging, packing groups I through III, limited quantities etc. <i>Note: Frequent course omissions and student failure</i> <i>to understand are Ullage and Absorbent Material</i> <i>Requirements in the general component and the</i> <i>general requirements and general packing provisions</i> <i>at the commencement of the explosives and gases</i> <i>packing instructions</i> .				
17	Shipper's responsibilities: a. general; b. package markings; c. package labelling; d. identification of labels; e. documentation (shipper's declaration).	Groups A and F - are required to cover all of the shipper's responsibilities. For other employees - (and freight shed security screeners) - labels are required on packages of DG both to identify the contents and to aid handling. The training should provide for illustration of all the hazard and handling labels; should depict the labels so that the specific hazard can be identified should a damaged package be found; should explain what the symbols and the colours on the labels mean. An explanation of the handling labels is also required with emphasis given to recognition of the 'Cargo Aircraft Only' handling label.				

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		Training needs to include the information that an operator's employee may replace a label on a package if it becomes detached or damaged during transit (this is only possible after the acceptance process).				
18	Operator's responsibilities: a. acceptance procedures; b. storage, loading and segregation; c. provision of information to Pilot-in- Command (NOTOC); d. emergency procedures.	 All employees of operators and GHAs - Training should confirm that apart from the DG that is permitted to be carried by passengers and crew, DG must not be carried in an aircraft cabin occupied by passengers or on the flight deck. a. Acceptance procedures - Group A employees - Use of current checklist, completion of all items, use in concurrent inspection of package and documentation. b. Storage, Loading and Segregation - Groups A, B and C - Temporary storage in freight shed, continue to apply segregation principles and measures to prevent inadvertent loading of cargo aircraft only goods onto passenger aircraft. Also need to cover inspection and decontamination. Table 7-1 of the TIs details the classes/divisions of DG that must be segregated from each other when loaded on an aircraft. An explanation of Table 7-1 or the equivalent Table 9.3.A from the IATA should be provided. Packages of DG must be secured in a manner that will prevent movement and damage in flight, including when loaded in a unit load device (ULD). Packages which are noted to be damaged or leaking packages of infectious substances and radioactive material, which includes the involvement of appropriately, qualified personnel. Employees should be made aware of the appropriate procedures for dealing with these items and referred to the section of the DG manual where these procedures are documented. Packages of radioactive material must be loaded in such a manner that the exposure to radiation is kept to acceptable levels for passengers/crew and unexposed film. Similar consideration needs to be applied to toxic materials, livestock, and dry ice. Groups A and C - The DG manual has tables of maximum Transport Index limits for each of the aircraft operated by the airline. These should be explained to crew. The limitations on loading magnetised material and dry ice should also be covered. Packages of DG must be inspected for signs of damage or leakage immediately prior to loa				
		Flight crew must be able to interpret the NOTOC and understand the relevance of the Emergency Response Drill Codes. The P-I-C is required to sign				

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		this document and retain a copy, which is held on the flight deck. Only one copy can be held for each sector and a new NOTOC provided at each transit port. d. Emergency procedures – relevant to the employee group. Groups A, B, C and D employees – ground emergency procedures. Group C and D employees - If unlawful DG is detected in the cabin the crew should be trained in the appropriate response. For operator's crew this should also include the in-flight spill kit. Students should be made aware of the possibility of a passenger having forbidden DG (or even goods that they are permitted to have) causing an incident on the ground or in flight. An operator should have procedures for dealing with this eventuality and these should be demonstrated to crew in detail. There is also the possibility that an incident may arise in general cargo and be caused by DG. The training should cover the procedures that are applied. If an operator provides for a DG Spill Kit to be carried on board, students should be made aware of the location and contents. Correct use of the items (through simulation of an incident) would enhance understanding and knowledge. As part of DG Emergency Procedures, some references to actual DG incidents i.e. Valujet or de-identified occurrences from the operator's own incident reports would provide some interest and encourage comment and feedback from crew (not necessary but recommended).				
19	Packagings: a. nomenclature and codes; b. markings and what they mean; c. requirements; d. performance tests.	Group A and F employees – Should cover the different markings and what they are. Students should be given examples of where UN specification markings do not marry up with the package (i.e. wooden box with 4G marking - <i>it happens!</i>). Obtain and present copies of performance test results – demonstrate and reinforce that just putting any old inner in a 4G box doesn't render it as complying with the packaging performance test. Class 7 courses also need to pick up Type A, B (U) and B (M) packaging and relevant approvals.				
20	Provisions concerning passengers and crew, including information to passengers	All employees – all courses - With the exception of a specified list of permitted items, dangerous goods are forbidden for carriage by passengers and crew. Operators and screening authorities should have procedures for dealing with passengers or crew who may, unknowingly, try to board an aircraft with forbidden DG. The permitted list Table 2.3.A of the IATA DGRs should be provided either as a reference or the information given directly in the training. As part of this training, employees should be made aware of the "Operator Approved" procedure, which should be documented in the DG manual. Operators must ensure that information is promulgated in such a manner that passengers are warned as to the types of DG which they are forbidden from transporting aboard an aircraft. Training should include how the operator achieves this and as a minimum it should include information provided with the ticket and notices at airports.				

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Operator / Training Course Provider: <Insert Company/Legal Entity Name> – ARN <xxxxxx>

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		Note: There is value in covering why Dry Ice should be vented and the procedures in IATA for preparing camping stoves and wheelchairs.				
21	Proper shipping names	Groups A, C and F – The numerical sequence of the DG List – the corresponding IATA reference is at 4.3. Also make note of the correct reference to DGs is the Proper Shipping Name. This is what appears on the Shipper's Declaration and NOTOC.				
22	State and operator variations	Groups A, C and F - States (governments) and operators can place additional restrictions on the carriage of dangerous goods by air (as prescribed by the TIs and IATA DGRs). Relevant variations and any operator specific variations should be made known to employees.				

** For additional explanation of the content of each syllabus item, refer to Advisory Circular AC 92-03(0) Appendix C

2.0 - Additional Feedback

#	Course Reference	Inspector Comments	Recommended Action	Training Cours Amendments / (include slide ref information has

Course Provider ents / Comments de reference where on has been added)	Satisfactory
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	🗆 Yes 🗆 No



<u>3.0 – Screenshots</u> * Delete if not required *

<Insert screenshots>

SUMMARY

Course Content

System Issues

Recommendation

Review conducted by:

- Dangerous Goods Inspector

Date:

Form 8881 – Dangerous Goods Training Course Assessment – Syllabus Compliance Statement (04/2017)