DANGEROUS GOODS PANEL (DGP)

MEETING OF THE WORKING GROUP OF THE WHOLE

Montreal, 18 to 22 April 2005

PART 2 - REPORT OF THE MEETING OF THE WORKING GROUP OF THE WHOLE WG/05

(Presented by the Secretary)

8.13 **Amendment to Special Provision A70 (DGP-WG/05-WP/16)**

8.13.1 An inconsistency in the application of special provision A70 to UN 3166 was discussed. It was noted that when shipping a vehicle that contains an internal combustion engine where the fuel tank has never contained any fuel, then it is not subject to these Instructions. However, when the same internal combustion engine is removed from the vehicle and is consigned under UN 3166, Engines, internal combustion, A70 does not appear to apply to an engine that is being shipped separately.

8.13.2 One member noted that although the fuel system might be completely empty of fuel, flammable vapour could still be present and pose a greater hazard. Some members had difficulty with the use of the word "never" in the first proposal in relation to the fuel tank not having contained fuel. Although there was general support for the second proposal which suggested removing A70 for the Engines, internal combustion entry and then adding a new special provision, the issue of ensuring the fuel tank being completely empty of fuel remained a problem. One member suggested using text similar to that in 4:1.1.15 regarding nullifying the hazard might be helpful. The proposer agreed to withdraw the paper and to look at the broader issues with a view to preparing a paper for DGP/20.

8.14 **Division 2.2 in Limited Quantities (DGP-WG/05-WP/24)**

8.14.1 A proposal to amend part 3;4.1.2 to remove redundancy in the provision relating to UN 2037 and UN 1950 was agreed..

8.15 **Aerosols with a Subsidiary Risk of Division 5.1 (DGP-WG/05-WP/25)**

8.15.1 It was proposed Table 3-1 should contain an entry for UN 1950, Aerosols with a subsidiary risk of division 5.1 on the basis such aerosols exist. A number of members were reluctant to agree, noting no information was provided regarding types of chemicals and the nature and quantity of a propellant. However, it was suggested passengers could legally carry these aerosols in their baggage since there was no subsidiary risk identified which would result in their prohibition.

8.15.2 The proposer noted an amendment to UN special provision 63 e) would be made at the upcoming session of the UN SCOE which would identify the subsidiary risk. A further proposal would then be made at DGP/20.

8.16 **UN2037 and Special Provision A98 (DGP-WG/05-WP/32)**

8.16.1 A proposal to extend the alleviation in special provision A98, assigned against aerosols of Division 2.2 without subsidiary risk in recognition of their medical application, to the corresponding entry for UN2037 (Gas cartridges or Receptacles, small, containing gas) was agreed. It was noted the pressure limit had been removed recently in A98 to align it with the equivalent special provision in the UN Recommendations and that gas cartridges are effectively aerosols without a release device.

8.17 **Special Provision A97 (DGP-WG/05-WP/34)**

8.17.1 At WG04, the problem regarding Special Provision A97 (assigned to UN 3077 and UN 3082) was introduced and discussed. It was agreed the designation of such substances by the appropriate national competent authority frequently caused delays in shipping.

8.17.2 A proposal to amend the text of special provision A97 such that shippers would make the classification on the basis they were knowledgeable with the classification criteria of the regulations was agreed in general. It was suggested and agreed reference to "the regulations of other modes of transport or criteria " should be replaced with " national or international regulations".

8.18 **Addition of Special Provision A2 to UN 3468 (DGP-WG/05-WP/43)**

8.18.1 Under the entry "Hydrogen in a metal hydride storage system "(UN 3468), transport of these storage systems - many of which are very small - is forbidden on both passenger and cargo only aircraft. However, it was noted hydrogen itself is permitted for transport on cargo only aircraft. The metal hydride is contained with the hydrogen in a hermetically sealed pressure receptacle that must be designed to contain the hydrogen gas at any internal pressure that may be encountered during transport. A proposal to add special provision A2 so that such storage systems would be permitted to be transported on cargo only aircraft with the approval of the appropriate authority of the State of origin was agreed.

8.18.2 It was suggested guidance to assist States could be developed for incorporation in the Supplement

8.19 **Proposed Amendment to Special Provision A66 (DGP-WG/05-WP/44)**

8.19.1 A proposal to remove a discrepancy which existed between special provision A66 in the Instructions and special provision 236 in the UN Model Regulations was agreed. It was noted more guidance regarding what was permitted in theses kits would now be given.

8.20 **Transport of Environmentally Hazardous Substances (UN 3077 and UN 3082) in Limited Quantities (DGP-WG/05-WP/48)**

8.20.1 Difficulties for shippers of limited quantities of UN 3077 and UN 3082 were presented It was noted since theses substances are only capable of posing a risk to the environment, they do

not pose any danger to the safety of an aircraft or it's occupants.. A proposal to permit these substances prepared in accordance with a limited quantity requirements for the surface modes to be accepted directly for transport by air was discussed.

8.20.2 One member believed the UN had agreed such quantities of environmentally hazardous substances were not subject to the recommendations. The proposer withdrew his paper until further information was received.

8.21 **Environmentally Hazardous Substances in Wipes (DGP-WG/05-WP/49)**

8.21.1 A proposal to alleviate the requirements for items impregnated with environmentally hazardous substances was withdrawn on the basis it was recognized to be a multi-modal problem. It was agreed to raise the issue at the upcoming July session and that a further paper might be presented to DGP/20.

Part 4 — Packing Instructions

8.22 **Draft Amendments to the Technical Instructions to Align to the UN Recommendations — Part 4 (DGP-WG/05-WP/5)**

8.22.1 Following presentation of WP/5, an oral report on the revision to the packing instructions was given - see paragraph 12.2.1.

8.23 **Packing Instruction 905 (DGP-WG/05-WP/11)**

8.23.1 It was explained that UN 3072 and UN 2990 frequently contained cylinders of carbon dioxide which were non refillable and which were not fitted with a pressure relief device. However, reference to packing instruction 200 in packing instruction 905 specified that cylinders must be fitted with a pressure relief device. It was noted the equivalent packing instruction 905 of the UN Recommendations permitted such gases in cylinders when specified by the competent authority.

8.23.2 There was general support for the proposal to align packing instruction 905 with the UN equivalent. It was noted it did not preclude those cylinders which required pressure relief devices from being permitted. It was noted "competent authority" should be replaced with "appropriate national authority" as was standard in the Instructions. It was also observed "of the country" was missing in packing instruction 200; a consequential change to both the proposal and to PI 200 was agreed.

t8.23.3 The meeting agreed to the proposal as modified by the discussion.

8.24 **Amendments to Packing Instruction 900 (DGP-WG/05-WP/15)**

8.24.1 When packing instruction 900 was amended in the 2001/2002 edition, the requirement relating to the carriage of an internal combustion engine that is not contained within a vehicle was added to the list of requirements that govern the shipment of such vehicles rather than being added separately. It was agreed this was an editorial error and should be corrected. The Secretary noted this would be included in the Corrigendum. A suggestion to replace "leakproof cap" with "leakproof closure" was not agreed since it was believed the term "capped off" is commonly used in industry and the term "closure" is defined as being part of a combination packaging..

8.25 **1.4 S actuating devices in dangerous goods in apparatus (DGP-WG/05-WP/17)**

8.25.1 A problem relating to the packing instruction 916, assigned to dangerous goods and apparatus, was presented. It was noted 1.4S explosive actuating device were not permitted although apparatus such as sonar buoys had squibs which contained very small quantities of 1.4S explosive.

8.25.2 A number of members expressed sympathy with the problem, noting the tiny quantities of explosive. One member suggested 2;1.1b) would indicate this squibs need not be classified as 1.4S. Some members noted that frequently such buoys contained lithium batteries and that these would be used as the basis for classification. It was suggested the problem might be a multi-modal one. The proposer agreed to check whether the classification as 1.4S was correct and that if confirmed, she would raise the issue at the UN.

8.26 **Dry Ice Contained in a Unit Load Device (DGP-WG/05-WP/19)**

8.26.1 A proposal to amend packing instruction 904 to specify a tag be placed on a ULD was presented. A number of issues were raised — the location for the requirement with the suggestion it should be in Part 5 with additional text in Part 7; the need for an acceptance check by an operator; the quantity that needed to be input on the NOTOC or AWB; whether an operator could act as a single shipper when consolidating shipments into one ULD. It was also noted that a single shipper could prepare ULDs containing magnetized material or consumer commodities.

8.26.2 Advice was sought whether the industry use of an IMP code was sufficient. One member suggested generally IMP codes could not be so considered. However, for dry ice, the code ICE was perhaps a better indication of the hazard that the class 9 label. It was agreed an ad hoc working group would meet at DGP/20 to review all the concerns raised.

Part 5 — Shipper's Responsibilities

8.27 **Draft Amendments to the Technical Instructions to Align to the UN Recommendations — Part 5 (DGP-WG/05-WP/6)**

8.27.1 WP/6 was presented and the following comments were noted.

8.27.2 On receiving confirmation that the term conveyance included aircraft, it was agreed to change "in a single conveyance" to "in an aircraft" in 1.2.2.2 c).

8.27.3 The need for a transitional period for the new organic peroxide label was noted.

8.27.4 Editorial corrections to 4.1.4.2 were noted.

8.28 **Total Quantity of Dangerous Goods (DGP-WG/05-WP/30)**

8.28.1 A proposal to clarify the quantity required under Part 5;4.1.5.1 for items such as UN 2990 or UN 3166, both of which contain more than one type of dangerous goods, was made. It was noted prior to 2003, a quantity was only required if a maximum quantity per package was shown in columns 10 or 12. A number of members suggested information regarding quantity provided useful information for emergency responders; others suggested the difficulty in accurately knowing what quantity of dangerous goods was contained in, for example, vehicles when only the gross mass was given. It was suggested 30 entries were in Table 3-1 for which this problem existed. The proposer asked for guidance from those who had commented and offered to bring a new working paper to DGP/20.

8.29 **Application of Labels on Small Packages (DGP-WG/05-WP/39)**

8.29.1 The problem to apply all required labels on packages containing small quantities of dangerous goods with multiple hazards and/or for dangerous goods which are only allowed on cargo aircraft was explained. Frequently, too big a packaging had to be used in comparison with the quantities transported; this could result in an unsafe situation since experience showed the difficulty in controlling the movement in the upright position of small inner packagings in a larger outer one. An alternative approach by some shippers who displayed the hazard labels at an angle of 90 degrees frequently results in the refusal of the package.

8.29.2 Most members accepted this caused significant difficulties for shippers and were supportive of the first proposal; others noted the historical acceptance of the traditional diamond shape and did not agree with a need to change.

8.29.3 The first proposal was agreed with a modification to add "or size". A further proposal to permit the placing of labels on two different adjacent sides was not agreed. It was suggested such an amendment could cause difficulty with segregation and may lead to unsafe situations.

8.30 **Quantity and Type of Packaging (DGP-WG/05-WP/42)**

8.30.1 Problems with the wording of 5;4.1.5.1 as revised at WG04 were presented. These related to provision of information to the pilot in command and to the ability of the operator to conduct a proper acceptance check.

8.30.2 Although there was support for the intent behind the proposal, it was suggested the proposed text did not provide a solution. Members had difficulty with the word "content" in the phrase "same type and content and type of package". It was explained this referred to the same item of dangerous goods i.e. having the same proper shipping name, contained in the same quantities and in the same type of packaging.

8.30.3 After considerable discussion, the proposer offered to prepare a revised paper for DGP/20.

8.31 **Magnetized Materials: Magnetic Field Strength and Loading Requirements (DGP-WG/05-WP/52)**

8.31.1 Problems with the loading of multiple packages of magnetized material was presented. It was suggested to facilitate such loading there should be a requirement for the shipper to state the magnetic field strength of each package on the shipping document and on the package.

8.31.2 One member suggested it was safer to encourage shippers to declare magnetized material. However, another noted no benefit would necessarily be gained by requiring the magnetic field strengths to be shown since the strengths could either add up or cancel out depending on the polarity. It was agreed it was an item of interest and the proposer offered to review the issue again at DGP/20.

Part 6 — Packaging Nomenclature, Marking, Requirements and Tests

8.32 **Draft Amendments of the Technical Instructions to Align to the UN Recommendations — Part 6 (DGP-WG/05-WP/7)**

8.32.1 During review of WP/7, attention was drawn to the frequent use of the word "required" in 7.21.1. The Secretary said she would review the paragraph to ensure optimal wording.

8.33 **"W" Packagings (DGP-WG/05-WP/33)**

8.33.1 It was noted the Instructions requires use of a "W" marked packaging only with the written approval of the State of Origin. It was suggested this involved extra paperwork for no apparent safety benefit. A proposal to align the Technical Instructions to the UN Recommendations was agreed.

8.34 **Plastic Aerosols (DGP-WG/05-WP/53)**

8.34.1 Following a brief presentation of WP/53 which proposed the incorporation of plastic aerosols into the Instructions, the proposer asked for comments to be sent to him so that a revised paper might be presented at DGP/20.

Part 7 — Operator's Responsibilities

8.35 **Part 7, Chapter 6 — Provisions to Aid Recognition of Undeclared Dangerous Goods (DGP-WG/05-WP/31)**

8.35.1 A proposal to clarifiy operator's responsibilities to provide information to passenger check-in staff was discussed. There was general support for the proposal, with the exception of the inclusion of reference to "place of work". Following minor editorial corrections and the deletion of the phrase "at their place of work" the proposal was agreed.

Part 8 — Provisions Concerning Passengers and Crew

8.36 **Safety Matches and Lighters (DGP-WG/05-WP/18 & IP/12)**

8.36.1 Clarification was sought regarding 8;1.1.12g) in which provision is made permitting passengers to carry safety matches and lighters; it was proposed to restrict the number of packets of matches as well as to clarify the prohibition for transport in checked or carry-on baggage.

8.36.2 It was suggested "on the person" may need to be defined; one possibility was "under the control of". There was general support for the proposal; it was agreed with a modification to reduce the number of packets permitted to one small packet.

8.36.3 A member offered to provide a working paper to DGP/20 clarifying the intent behind lighters containing liquified gas referred to in the same subparagraph..

8.37 **Lighters Carried by Passengers (DGP-WG/05-WP/47 & IP/6)**

8.37.1 The decision by one State to extend the restriction on lighters so that passengers may not carry them at all was discussed. It was noted a number of incidents have been reported of lighters in check or carry-on baggage causing fires but none have been reported for those carried on a person.

8.37.2 An overwhelming majority of members re-affirmed that safety matches and a lighter should, in the interests of flight safety, continue to be permitted on the person of a passenger, due to the increased likelihood of passengers secreting such items in baggage with the attendant increased risk of fire that a ban would lead to. This was both in contravention of the safety provisions of the Technical Instructions and posed a significant safety risk.

9. DEVELOPMENT OF RECOMMENDATIONS FOR AMENDMENTS TO THE *SUPPLEMENT* TO THE *TECHNICAL INSTRUCTIONS* FOR INCORPORATION IN THE 2007/2008 EDITION

9.1 ICAO Technical Instructions Part 4, Chapter 3 (DGP-WG/05-WP/35)

9.1.1 A proposal to permit the transport of UN 3077 in IBCs was discussed. Some members supported the proposal in general, noting the standard use of IBCs for non-dangerous goods in their States. They further noted that UN 3077 posed no danger to aircraft or passengers and suggested it was preferable to transport large quantities in a single high quality packaging than in numerous, lower quality ones It was also noted the proposal was for incorporation in the Supplement at this time which would permit States to gain experience with these packagings.

9.1.2 Other members disagreed with the need to permit IBCs and suggested the mass of such packagings could pose problems from an airworthiness viewpoint related to centre of gravity issues. One member suggested more information was required before he would be able to support such a proposal. Such information included the tests the packagings would be required to pass, whether the state of the substance in powder form created additional problems, restraint criteria, etc.

10. AMENDMENTS TO DOC 9481 *EMERGENCY RESPONSE GUIDANCE FOR AIRCRAFT INCIDENTS INVOLVING DANGEROUS GOODS*

10.1 No papers were presented on this issue at this time.

11. DISCUSSION OF MISCELLANEOUS DANGEROUS GOODS ISSUES

11.1 ICAO DGP WEBSITE (DGP-WG/05-WP/21 & IP/1)

11.1.1 There was strong support for the proposal to make the DGP website open to public access. It was noted this would assist the work of panel members by allowing for wider consultation with those who had technical expertise.

11.2 **Limited Quantities and Consumer Commodities (DGP-WG/05-WP/45 & IP/3)**

11.2.1 An ad hoc working group reviewed WP/45 and IP/3 and presented their report. (Secretarial note - details from Flimsy 10 to be inserted)

12. RESOLUTION, WHERE POSSIBLE, OF THE NON-RECURRENT WORK ITEMS IDENTIFIED BY THE COMMISSION OR THE PANEL

12.1 **Principles governing the transport of dangerous goods on cargo only aircraft**

12.1.1

12.2 **Reformatting of the packing instructions**

12.2.1 An oral report on the work of an ad hoc working group on the revision of packing instructions was given. It was explained that a meeting had been held in Brussels in March, that the terms of reference endorsed by the Panel had been followed and that substantial progress had been made. It was noted another working group would meet shortly in order to finalize the contents of a working paper on the subject which would allow sufficient time for consultation before DGP/20. It was noted that decisions regarding the best location for the revised packing instructions together with the issue of a transitional period would need to be discussed at DGP/20.

12.3 **Review of provisions for dangerous goods carried by passengers and crew**

Passenger Exceptions Survey (DGP-WG/05-IP/9)

12.3.1 An ad hoc working group reviewed IP/9 and presented their report. (Secretarial note - details from Flimsy 8 to be inserted)

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