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COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Fifth session Geneva

REPORT OF THE COMMITTEE OF EXPERTS ON ITS FIFTH SESSION (21 - 29 June 1967)

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REPORT

- 1. The Committee of Experts on the Transport of Dangerous Goods held its fifth session from 21 to 29 June 1967. The session was attended by experts appointed by the following countries: the Federal Republic of Germany, France, Italy, Norway, Poland, the United Kingdom and the United States of America. The following organizations were represented by observers, who took part in the work of the Committee in an advisory capacity: Universal Postal Union (UPU), International Labour Organisation (ILO), World Health Organization (WHO), Inter-Governmental Maritime Consultative Organization (IMCO), Central Office for International Transport by Rail (OCTI), International Air Transport Association (IATA), International Organization for Standardization (ISO), International Union for Inland Navigation (UINF), International Road Transport Union (IRU), International Chamber of Shipping (ICS) and International Cargo Handling Co-ordination Association (ICHCA).
- 2. The Committee adopted the provisional agenda submitted by the Secretariat (E/CN.2/CONF.5/R.81) subject to amendments in items 7 (a) and 11, which were re-worded to read:
 - 7(a) Colours to be used on labels.
 - 11. Next sessions of the Committee and its subsidiary bodies.
- 3. The Committee also decided to consider, under the appropriate items of the agenda, certain specific questions raised in communications received regarding agenda item 3 (a).
- 4. On the proposal of the expert from the United States of America, supported by the experts from France and Poland, Mr. A.W. Clarke United Kingdom) was unanimously re-elected Chairman.

 RESOLUTIONS 994 (XXXVI) and 1110 (XL) ADOPTED BY THE ECONOMIC AND SOCIAL COUNCIL
 - The Committee took note of Economic and Social Council resolution 1110 (XL).
- 6. It took note of the comments of governments and international organizations on the Committee's Recommendations (E/CN.2/CONF.5/R.84).
- 7. It also noted a statement by the Secretariat on the publication of the revised version of the Recommendations considered by the Committee Transport of dangerous goods (1966), ST/ECA/81-E/CN.2/CONF.510/Rev.17. It requested the experts and observers to inform the Secretaria of any clerical errors which might have found their way into that document respite the care taken in its publication.

5.

^{*/} See attendance list (E/CN.2/CONF.5/27).

ACTIVITIES OF INTERNATIONAL ORGANIZATIONS CONCERNED AT THE INTERNATIONAL LEVEL WITH THE DRAFTING OF REGULATIONS OR RECOMMENDATIONS ON THE CARRIAGE OF DANGEROUS GOODS

Economic Commission for Europe (ECE)

- 8. The Secretariat informed the Committee of the ECE Inland Transport Committee's work on regulations governing the carriage of dangerous goods.
- 9. More particularly, it outlined the situation with regard to the entry into force of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed at Geneva on 30 September 1957. The revision of the 1957 Annexes had removed the main obstacle to such entry into force, and the Secretariat thought that a fifth government would shortly deposit its instrument of ratification or accession, thereby bringing the Agreement and, subsequently, its Annexes into effect. There was every reason to expect that the Agreement's Annexes would enter into force early in 1968.
- 10. The Secretariat said that the Economic Commission for Europe's Inland Transport Committee had adopted a resolution, No. 209 (E/CN.2/CONF.5/R.86, annex 2), drawing attention to "the need for harmonization taking into account the Recommendations of the Committee of Experts of the Economic and Social Council", and recommending Governments to give appropriate instructions to their representatives in the international organizations, including particularly the RID Committee of Experts and IMCO.

Inter-Governmental Maritime Consultative Organization (IMCO)

- 11. The Committee took note of the communication from IMCO (E/CN.2/CONF.5/R.86/Add.2) and of the comments on it made by the observer from that Organization, with particular reference to the priority which the IMCO Maritime Safety Committee desired to be given to work on Class 1, and to the studies which IMCO had decided to pursue.
- 12. With regard to paragraph 2 of the above document, in which IMCO announced its intention to propose to the Committee additions to the United Nations list, the expert from France asked whether all substances and articles which were added in existing regulations should be incorporated in the list, or whether in the light of paragraph 26 of the Recommendations, the Committee could use its discretion.

^{*/} International Regulations concerning the Carriage of Dangerous Goods by Rail.

- 13. Those supporting the latter alternative not only invoked the text of paragraph 26 of the Recommendations, but also pointed out that it was not possible constantly to bring the list up to date, and that the list would soon become very lengthy. Those supporting the other view argued that it would be easier to harmonize the various regulations if the United Nations list were supplemented by the insertion of new dangerous goods brought within the scope of those regulations. Moreover, if that were not done, it would be impossible to include the serial number of the United Nations classification number in those regulations, as was the practice in the IMCO International Maritime Dangerous Goods Code and as the RID Safety Committee had decided to do in the alphabetical table of its Regulations.
- 14. Eventually, the Committee decided that the governments and international organizations concerned should continue to inform the Committee of new dangerous goods, carried internationally, which were added to the lists incorporated in the various sets of regulations.
 - International Atomic Energy Agency (IAEA)
- 15. The Committee took note of the communication from IAEA reproduced in document E/CN.2/CONF.5/R.86/Add.3.
 - Central Office for International Transport by Rail (OCTI)
- 16. The observer from OCTI informed the Committee that the ECE Inland Transport Committee's resolution No. 209 had produced results, so far as the RID was concerned, since the RID Safety Committee had, subject to approval by the Plenary Commission, decided at its last session (7-14 June 1967) to accept the Recommendations of the Committee of Experts in principle, with the exception of the few points listed below.
- 17. Apart from the problem of colours, on which the RID Committee had made a proposal to the Committee of Experts (E/CN.2/CONF.5/R.91), the RID Committee had reserved its position with regard to the use in certain cases of the green label with the "gas cylinder" symbol for gas cylinders and with regard to the absence of a label with the "Saint Andrew's cross" symbol prescribed in the RID for toxic substances which were not very dangerous.

- 18. While adopting the blue label recommended by the Committee of Experts for substances of Division 4.3, the RID Committee had retained the rectangular label with the "umbrella" symbol to indicate the precautions to be taken.
- 19. The inscription of the number of the Class in the bottom corner of the label would be optional in the RID.
- 20. With regard to classification, the RID Committee had not agreed to the establishment in the RID of a Class corresponding to Class 9, and had asked the Committee to consider the possibility of dispensing with that Class (E/CN.2/CONF.5/R.94).
- 21. The RID Committee had deferred a decision with regard to the adoption, for explosives, of the Sub-Divisions of Class 1 recommended by the Committee of Experts.
- 22. At its next session, the RID Committee would consider the inclusion of substances of the United Nations list which were not contained in the RID, and the transfer between Classes of substances belonging to different classes in the RID and in the United Nations list respectively.
- 23. The observer from OCTI also said that the RID Committee had decided to apply the principle adopted by the Committee of Experts of instituting technical tests for packagings. A working group had been set up for that purpose.
- 24. The Committee requested the observer from OCTI to convey to the RID Safety Committee its keen satisfaction at the decisions adopted by that Committee and at the major contribution it had thus made towards harmonizing at the world level the regulations for all modes of transport.
 - International Air Transport Association (IATA)
- 25. The observer from TATA said that his Organization supported the Committee's long-term objectives.
- 26. He announced that, at a session which had just ended the IATA Permanent Working Group on the Carriage of Restricted Articles had decided to add to its lists a number of dangerous goods not yet included in the United Nations list. It had also considered a number of new packagings, for which rules would subsequently be included in the IATA Regulations relating to the Carriage of Restricted Articles by Air.

LISTING AND CLASSIFICATION OF SUBSTANCES AND ARTICLES Numbering of substances and articles

- 27. On the proposal of the Secretariat (E/CN.2/CONF.5/16, paragraph 49) the Committee decided that the serial numbers of substances and articles would be preceded not only by the Class number, but also, where applicable, by the number of the Division and Sub-Division. Where a substance belonged to a Class having no Divisions, the Class number would be preceded by two noughts. If the Class in question had Divisions but no Sub-Divisions, the number would be preceded by one nought.
 - 28. This decision will be applied when a new edition of the Recommendations is published.

General considerations concerning the classification of explosives

29. The Committee took note of the communications from the Canadian Government (E/CN.2/CONF.5/R.84, page 4, paragraph 8) and from the South African Government (E/CN.2/CONF.5/R.84, pages 10 and 11).

Work of the Group of Experts on Explosives

Safety explosives group

30. The Committee adopted the principle proposed by the Group of Experts on Explosives with regard to the "Safety explosives group" (E/CN.2/CONF.5/18, annex 1 page 1). It considered, however, that until the Group of Experts had completed its work on packaging it would be premature to insert the proposed text in the Recommendations.

Classification of dinitrotoluenes

31. In accordance with the suggestion of the Group of Experts (E/CN.2/CONF.5/18, paragraph 12), the Committee decided to include a new item "dinitrotoluenes, solid" in class 6.1.

Ammunition, Sporting, NME (1/17)

- 32. The Committee accepted the proposal by the Group of Experts (E/CN.2/CONF.5/24, paragraph 5) for the transfer of this item from Sub-Division 1.2.1 to Division 1.3

 Various proposed amendments
- 33. The proposed amendments set out in document E/CN.2/CONF.5/18, annex 1, pages 2 et seq., were adopted.

Compatibility of military explosives

- 34. The Committee gave lengthy consideration to the Group of Experts' work on the compatibility of military explosives and ammunition in transport (E/CN.2/CONF.5/24, annex 1). Since in the particular case of Class 1 it was difficult to keep questions of packaging separate from questions relating to the prohibition of mixed loading or stowing, and since the classification of explosives within Class 1 may depend on their packaging, the Committee decided that the Group of Experts should continue its work with regard to the loading of such explosives with one another and with substances and articles of other Classes.
- 35. It seemed to the Committee that continuation of that work came within its terms of reference because, as was clear from Economic and Social Council resolution 645 (XXIII) G, it was empowered to study packing and related problems.
- 36. On the other hand, the Committee took the view that for the time being it should not extend its activities to include problems relating to the loading of dangerous goods of all Classes with one another. It was pointed out in that connexion that the solutions to those problems might differ from one mode of transport to another.

 Classification of dangerous goods other than explosives

Class 2

Criteria used for defining gases: compressed, liquefied, or dissolved under pressure

37. The Committee took note of the observation by the Japanese Government (E/CN.2/CONF.5/R.84, paragraph 1 (a)) (i), page 7) concerning criteria for the definition of "gases: compressed, liquefied or dissolved under pressure", and noted that the problem was settled by the text on pages 4 and 5 of the revised edition of the Recommendations (ST/ECA/81/Rev.1).

Mixtures of hydrogen and methane; trifluoroethane; and xenon

38. The Committee decided to add to the list the new substances proposed by IMCO (E/CN.2/CONF.5/R.92, page 1) Subsidiary risk "3" should be added for mixtures of hydrogen and methane and for trifluoroethane.

Gas receptacles (non-refillable)

- 39. The Committee decided to add the following item to the list:

 "Receptacles, small, containing inflammable compressed gas, not fitted with a dispersion device, not refillable".
- 40. The expert from the United States reserved his position, since the item related to a packaging and not to a substance.

Class 3

Definitions

- 41. The Committee took note of the communication from the Danish Government (E/CN.3/CONF.5/R.84, page 4) concerning the classification of inflammable liquids in the Danish regulations.
- 42. It also noted that the Canadian Government did not consider certain inflammable liquids included in the United Nations list to be of sufficient hazard to warrant regulation (E/CN.2/CONF.5/R.84, page 3, paragraph 4.

Deletion of items 3/1254 and 3/1269

43. The Committee adopted the proposals made by the expert from the United Kingdom (E/CN.2/CONF.5/R.79), items 3/1254 and 3/1269 being accordingly deleted.

Class 4

Pyrophoric metals, alloys and powders

- 44. Documents E/CN.2/CONF.5/R.80 and R.80/Add.1, which had been prepared by the expert from the United Kingdom in consultation with the expert from the United States of America, were considered by a small group comprising, in addition to the above two experts, the experts from Poland and from the Federal Republic of Germany and the observers from OCTI and ICS.
- 45. It seemed to the small group that the difficulty of the problem lay in the lack of precision in defining the pyrophoric nature of substances, and that laboratory tests should be resorted to to achieve a precise definition. It considered that the aforementioned experts should undertake studies and tests in their respective countries.

46. The Committee decided that particulars of the experts! studies and conclusions would be forwarded by the United Kingdom expert to the Secretariat by 30 June 1968, and that the Secretariat would communicate them to the other members of the Committee, who would submit within two months any comments they might wish to make. The comments would be forwarded to the Secretariat, which would place them before the Committee's members early enough for it to be possible to consider them, together with the aforementioned documents, at the Committee's next session.

Division 4.1 Sodium dinitro-ortho-cresolate (1/234)

- 47. The proposal by IMCO in paragraph 2 of document E/CN.2/CONF.5/R.92 was adopted.

 Division 4.2 Proposed addition of item "Brewer's grain"
- 48. The Committee did not make to the list the addition proposed by IMCO in paragraph 3 of document E/CN.2/CONF.5/R.92; in its opinion, only maritime transport was concerned.

Division 4.3 Ferrosilicon (4/1408)

45. The IMCO proposal in paragraph 4 of the above document was adopted.

Class 5

Division 5.1

Fertilizers, including mixtures

- 50. The Committee considered document E/CN.2/CONF.5/R.82. It was informed that the classification of the substances in question was being comprehensively studied by a working group associated with the IMCO Sub-Committee on Dangerous Goods.
- 51. The Committee decided to await the results of that working group's work.

 The observer from IMCO stated that he would endeavour to forward them to the Secretariat by 30 June 1968 if at all possible. The procedure for circulating and considering the results of the work will be the same as the procedure mentioned in paragraph 46 above for pyrophoric metals, alloys and powders.

Calcium nitrate (5/1454)

52. The expert from Norway, referring to an amendment made by IMCO to the wording of the item, asked the Committee whether it should not be made clear that what was being referred to was anhydrous calcium nitrate. The Committee did not see fit to amend the list for the time being.

Sodium perborate (5/1501)

53. The IMCO proposal for the deletion of the substance (E/CN.2/CONF.5/R.92, paragraph 5) was adopted. Item "5/1480 - Perborates, inorganic, n.o.s." will be accompanied by a note indicating that sodium perborate is not a dangerous substance.

Division 5.2 and Class 1

Organic peroxides

- 54. A small group consisting of members of the Committee particularly qualified in the matter, made a preliminary study of the report prepared by the expert from the Federal Republic of Germany (E/CN.2/CONF.5/R.89) and concluded from it that consideration might be given to the desirability of grouping all organic peroxides in the same Class.
- 55. It was recalled during the discussion on that point that the Committee had e recently decided to assign certain organic peroxides to Class 1; adoption of the solution now advocated would compel the Committee to reverse that decision. It was argued that to assign all organic peroxides to the same Class would be at variance with the principle that classification should be based on the nature of the risk inherent in a substance, and not on the substance's chemical composition.
- 56. Eventually, the Committee agreed that further study was essential before it could adopt a decision on the classification of organic peroxides. The study was entrusted to the experts from the Federal Republic of Germany, the United Kingdom and the United States of America, who will discuss the matter by correspondence or by any other means they deem appropriate. The results of the study will be communicated to the Secretariat not less than six months before the Committee's next session.

Class 6

Division 6.1 Criteria for defining toxicity

57. The Committee took note of the Japanese Government's observation / E/CN.2/CONF.5/R.84, paragraph 1(a)(ii), page 7 / concerning the criteria for defining toxicity and noted that the problem was settled by the text of the revised edition of the Recommendations (ST/ECA/81/Rev.1), at the beginning of Class 6 (Annex 1, Part II).

Division 6.2

Etiological agents

- 58. The Committee took note of the communication from the Government of Japan /E/CN.2/CONF.5/R.84, paragraph 1 (a)(ii) and (b), page 77, and heard a statement by the observer from WHO, who said that, in view of the growing volume of consignments of etiological agents, his Organization would prepare for the Committee's next session a study on the carriage of such substances. The study would deal more particularly with the following four points:
 - (a) whether the definition of Division 6.2, as given on page 6 of the Recommendations, was satisfactory to WHO;
 - (b) if not, how it should be amended;
 - (c) whether the note on page 315 of the Recommendations should be amended; and
 - (d) what were the particular problems that arose with regard to the packing of those substances.

Class 8

Antimony pentachloride (8/1730 and 8/1731)

59. The Committee adopted the IMCO proposal (E/CN.2/CONF.5/R.92, paragraph 6), which concerned the English text only.

Corrosive compounds (8/1759)

60. The expert from the United States of America will forward to the Secretariat the report on his study of how these substances should appear in the list, and will make proposals on the subject /E/CN.2/CONF.5/16, paragraph 53 (g)/. Class 9

Proposal to delete this Class

61. The proposal by the RID Safety Committee (E/CN.2/CONF.5/R.94) was introduced by the expert from France, who drew attention to the disadvantages of retaining Class 9, "Miscellaneous dangerous substances", in the Recommendations. In his view, that Class served no useful purpose, since the other Classes covered all categories of danger arising during carriage. Its existence was an obstacle to

the harmonization which the Committee desired, because the Class was used in certain regulations either where insufficient information was available regarding the properties of substances or for reasons which had nothing to do with safety. Lastly, it was dangerous, because carriers, forwarding agents and sometimes even senders might be unaware of the danger inherent in the goods they were handling.

The expert from Italy associated himself with the statement by the expert from 62. France.

...

- 63. The experts from Poland and the United Kingdom stressed the advantages of retaining Class 9. Substances could be included in that Class which could not be assigned to any of the other Classes because the risk they entailed was different. The Class had been regarded as essential in the IMCO International Maritime Dangerous Goods Code and in the IATA Regulations relating to the Carriage of Restricted Articles by Air.
- 64. That argument was illustrated by examples contributed by the observers from The observer from IATA added that the inclusion of a substance IMCO and IATA. in the corresponding Class of the IATA Regulations made it possible to impose for that substance special packaging requirements which were essential for the purposes of carriage by air.
- 65. The experts from the Federal Republic of Germany, Norway and the United States of America favoured the retention of Class 9 for carriage by air and by sea; in their view, such a Class was not essential for the purposes of carriage by rail or by road.
- 66. In view of the considerations which had been put forward, the French expert introduced the following proposal:
 - (a) that Class 9 should be deleted from the Committee's Recommendations;
 - (b) that a Recommendation should be added to the effect that if, in certain modes of carriage, particular substances entailed dangers of a special kind not classifiable as a kind occurring in any one of the eight Classes (e.g. magnetic substances for carriage by air), the regulations governing those modes of carriage could include one or more additional Classes corresponding to those special dangers.

- 67. The Committee considered that, in view of paragraph 25 of the Recommendations, which defined the substances which that Class could embrace, and of paragraph 29, which regulated the inclusion of dangerous goods in different Classes in different regulations, there was no occasion to delete Class 9. It noted that the majority in the Committee had acknowledged that Class 9 was not essential for the purposes of carriage by rail or road. A note to that effect would be added to paragraph 25 of the Recommendations when document ST/ECL/81/Rev.l was next revised.

 Border-line cases
- 68. The Committee took note of the document prepared by the expert from the United Kingdom (E/CN.2/CONF.5/R.75).
- 69. The expert from France said that he agreed entirely with the conclusions of the study (E/CN.2/CONF.5/R.75, annex, page 3) and more particularly with conclusion (iii).
- 70. The observer from IATA expressed the same opinion with regard to conclusions (i) and (ii); with regard to conclusion (iii), he said that a Class of miscellaneous dangerous substances should be retained.
- 71. The author of the document explained that he had not intended to recommend that such a Class should be abolished, but merely that it should be used only for suitable technical purposes.
- 72. The Committee decided to delete from the list the following substances marked in column 7 of the list in the annex to document E/CN.2/CONF.5/R.75:

Ammonium thiocyanate	(Sulfocyanate d'ammonium)	(8/1900)
Antimony sulphide	(Sulfure d'antimoine)	(6/155 2)
Arsenic, metal	(Arsenic métallique)	(6/1558)
Oxalic acid	(Acide oxalique)	(6/1666)
Oxalic salts	Oxalates (sels de l'acide oxalique)	(6/1667)
Sodium hydrogen sulphate, solution	(Bisulfate de sodium en solution)	(8/1822)

"Potassium fluoride", (8/1812) will be transferred from Class 8 to Division 6.1.

73. The Committee agreed that the United Nations list should be reviewed when the work on packaging was completed, with a view to making such simplifications as might be found necessary.

Pesticides, weed-killers, fungicides

74. The expert from the United States will complete the study undertaken on the subject /E/CN.2/CONF.5/16, paragraph 53 (f)_7.

Amendments adopted during the session to document ST/ECL/81/Rev.1

75. The decisions adopted by the Committee during the session with regard to the amendments to be made to annex 1 to document ST/ECL/81/Rev.l are reproduced in the annex to this report. They are subject to approval by the Economic and Social Council.

PACKING

General problems concerning packing

Communication from the International Chamber of Commerce (ICC)

76. The Committee considered the communication from ICC reproduced in document E/CN.2/CONF.5/R.96. It requested the Group of Rapporteurs on the Packing of Dangerous Goods to take it into account in its work and to include in its final recommendations a text based on the second paragraph of that communication.

Description of packagings

- 77. The Committee had before it the proposal by IMCO (E/CN.2/CONF.5/R.95) that an annex should be prepared describing and illustrating the various types of packaging and it requested the Group of Rapporteurs to give effect to that proposal.
- 78. The expert from Italy agreed to prepare a draft, which will be considered at a later session of the Group.

Coding of packagings

- 79. The Secretariat read out a letter from the director of OCTI transmitting a request from the RID Safety Committee asking the Committee to request the Group of Rapporteurs to prepare for complete packagings a coding system similar to that in use for outer packagings (E/CN.2/CONF.5/14, annex 2).
- 80. The Committee took the view that it was not possible to prepare such a code, because of the considerable number of possible combinations of outer with inner packagings. The situation would be different if the request had been for the preparation of a coding system for inner packagings similar to that provided for outer packagings. The joint use of the two codes would make it possible to identify the combinations of the two kinds of packagings.

- 81. The Committee requested the Group of Rapporteurs to devote such attention to the question as it could without interfering with the progress of its other work.
 - Relative importance to be attached to specifications
- 82. Before considering the sections of the reports of the Group of Experts on Explosives dealing with questions of packing (E/CN.2/CONF.5/18 and 24) and the reports of the Group of Rapporteurs on the Packing of Dangerous Goods (E/CN.2/CONF.5/20, 22 and 26), the Committee discussed a general question of common interest to the two Groups, i.e. the relative importance to be attached to the specifications in the light of the provisions laid down concerning the testing of packages or packagings.
- 83. The expert from the United States of America recalled that he had on several occasions stated before the Group of Rapporteurs that, once the work on tests for packages or packagings had been completed, specifications more detailed than some of those in document E/CN.2/CONF.5/R.87 (pages 7-10) should be laid down.
- 84. The rules on specifications for packagings were very detailed in his country, but there was a middle way between the United States specifications and those in the document he had mentioned.
- 85. The Committee then considered the draft specifications in document E/CN.2/CONF.5/R.88 and expressed the view that they formed a perfectly sound basis for the work of the Group of Rapporteurs.

Work of the Group of Experts on Explosives

Study of the sections of the reports of the Group of Experts (fifth and sixth sessions) dealing with packaging

- 86. The Committee reviewed each of the sections of document E/CN.2/CONF.5/R.87, which document set out the results of the work of the Group of Experts. It noted that section III contained specifications for commonly used packagings only. It was agreed that the section would be reviewed by the Group of Experts after the Group of Rapporteurs had prepared specifications for packagings.
- 87. With regard to section IV of the document, it was stated that the particular packing requirements for substances would be completed by the Group of Experts at its next session.

- 88. The Committee took the view that some of the "special notes" included on the specification sheets of Section V (Particular packing requirements for explosive articles) did not belong there, and that their content ought to appear either in the lists of substances and articles or in the definitions. It requested the Group of Experts to consider the matter at its next session and to place relevant suggestions before the Committee.
- 89. In the Committee's view, document E/CN.2/CONF.5/R.87, although not quite complete, nevertheless constituted a basis which international organizations might use in their own work.

Net weight of packages

90. The Committee noted that the Group of Experts had reduced the weight of packages to 75 and 100 kg (E/CN.2/CONF.5/18, paragraph 20).

Corrugated fibreboard

- 91. The Committee also noted that the Group of Experts had accepted the use of corrugated fibreboard equally with that of any other fibreboard (E/CN.2/CONF.5/18, paragraph 20).
 - Work of the Group of Rapporteurs on the Packing of Dangerous Goods (second, third and fourth sessions)
- 92. Mr. Savi, Chairman of the Group of Rapporteurs, introduced the reports submitted to the Committee (E/CN.2/CONF.5/20, 22 and 26).
- 93. The Committee confirmed the principle that the least costly packaging requirements applicable to a given mode of transport should be taken as the starting point and then supplemented, if necessary, by additional provisions applicable to other modes of transport.
- 94. The observer from IATA, while accepting that principle, considered that for the reasons set out in document E/CN.2/CONF.5/R.93 there should at some point be a special reference to air transport, more particularly regarding the acceptance on other modes of transport of dangerous goods carried by air.
- 95. The Committee noted that the Group of Rapporteurs had reaffirmed the principle that tests should be carried out on packages ready for dispatch and added to the draft recommendations on general packaging requirements a provision regarding the use of plastics materials (E/CN.2/CONF.5/20, annex 2 and E/CN.2/CONF.5/R.65/Rev.1, annex, section V.1, page 5).
- 96. The expert from Poland proposed that paper, textile and plastics bags should undergo a stacking test.
- 97. The Committee did not adopt that proposal.

- 98. The observer from UINF considered that the uniform height of 1.20 m prescribed for drop tests was not justified, and was too severe for certain packages or packagings, such as wooden cases for carriage by land.
- 99. The Committee approved the suggestion by the Group of Rapporteurs that it should suspend its work on tests in order to follow up other packaging problems actively (E/CN.2/CONF.5/26, paragraph 33). It was agreed that the preparation of specifications for packagings might make it necessary to revise the provisions concerning tests.

Gas cylinders

100. After having heard a statement by Mr. Black, the observer from ISO, on progress in the work of Technical Committee ISO/TC.58 on gas cylinders, the Committee requested him to draw the attention of his Organization and of the Technical Committee in question to the urgent need for solutions to the questions raised by the Committee (E/CN.2/CONF.5/16, paragraph 71).

Harmonization and consolidation of the results of the work of the Group of Experts and the Group of Rapporteurs

101. Taking note of the progress made in the work of the Group of Experts and the Group of Rapporteurs, the Committee agreed to the holding of a joint meeting of the two Groups, in principle during the summer of 1969.

IABELLING

Colours of danger labels

- 102. The observer from OCTI summarized document E/CN.2/CONF.5/R.91, which contained a communication from his Organization about the decision adopted by the RID Safety Committee to submit to the Committee of Experts, for consideration, a compromise solution under which the top half of the danger labels recommended by the United Nations would be of the orange-yellow colour recommended by ISO as a danger-warning colour.
- 103. The Committee decided to omit from the discussion any consideration of the impact of that proposal on the labels for Class 7 laid down by IAEA.
- 104. Since the proposal made in and adopted by the RID Safety Committee had originated from the Administration of the German Federal Railway, the expert from the Federal Republic of Germany restated the reasons for that proposal (see annex to

document E/CN.2/CONF.5/R.91), stressing particularly the advantages of associating the colour orange_yellow, which had been adopted by ISO in its recommendation R 408, with the colours recommended by the United Nations. That compromise solution also had the advantage of making the labels more expressive, since the black symbols showed up better on an orange-yellow ground than on a ground of any other colour. He strongly urged the Committee to adopt the proposal transmitted by the RID Safety Committee.

- 105. The observer from UINF pointed out that ISO Recommendation R 408 was applicable only inside chemical plants, and not in the carriage of chemicals.
- 106. The observer from ISO explained that recommendation R 408 was general in scope and applied more particularly to storage and transport.
- 107. The proposal transmitted by the RID Safety Committee was discussed at length, the experts from France, Italy and Norway associating themselves with the statement by the expert from the Federal Republic of Germany.
- Nations colour system should not be changed. That system, which was applied by IMCO in maritime transport, had proved its worth. It was universally recognized, and had become familiar to handlers. In his view, the system recommended by the RID Safety Committee did not promote safety because it was liable to create confusion. In fact, the colour yellow, to which the function of a danger warning was assigned, was in many countries the characteristic sign of a substance's instability, and not of the danger inherent in it. He recognized that the RID Safety Committee's proposal might help to solve certain problems peculiar to the governments which applied the Regulations, but it could in no circumstances constitute a universal solution.

- 109. The expert from the United States of America also drew attention to the unfortunate effects that any change in the United Nations system would be bound to have in the present circumstances, when his Government had made considerable progress in the procedure leading to the adoption of that system. Any such change now might considerably delay the desired harmonization and prolong the situation which was causing concern to consignors in world trade.
- 110. The expert from Poland said that only the United Nations labelling system should be used; that would ensure the desired uniformity.
- Ill. The observer from IATA said he shared most of the views just expressed by the expert from the United States of America. The Permanent IATA Working Group on Restricted Articles hoped to be able to adopt the United Nations system when the United States Government had completed the procedure it had put in hand. He also drew attention to the disadvantages of having one system for air transport and another for carriage by land, since a substantial volume of goods was carried by the two modes successively. The white and yellow labels at present used in air transport and recognized by the United Nations Recommendations served an important safety purpose in the segregation and stowage of certain Classes of goods. That advantage would be lost under the new proposal, for there would be some yellow on every label.
- 112. The observer from IMCO supported, in general, the views expressed by the expert from the United States; the views and needs of non-European countries should be taken into account. He pointed out that, under the system proposed by the RID Safety Committee, the labels for inflammable liquids and for solids liable to spontaneous combustion, for example, would become identical in colour. That would create a dangerous situation, because those substances were incompatible and required segregation in carriage by sea. The effects of adding the colour yellow to the United Nations labels might therefore require further consideration.
- 113. The observers from ICS, UINF and IRU, expressed themselves in favour of retaining the labelling system recommended by the Committee.
- 114. Having considered the arguments for and against the two alternatives, the Committee agreed that the system suggested by the RID Safety Committee could exist alongside the United Nations system in its present form, although that

- might entail certain disadvantages; the experts from the United States of America and the United Kingdom expressed reservations regarding the position adopted by the Committee, and requested that the matter should be taken up again later.
- 115. Since the RID will probably not be revised again for some years, the Committee will consider at its next session what amendments should be made to document ST/ECA/81/Rev.l, annex 2.
- 116. The Chairman appealed to the governments of all the countries concerned to take such action in the matter as was likely to promote the achievement of a universally acceptable solution.

Shades of colour to be used on danger labels

- 117. The Committee took note of the study prepared by the European Committee of Paint and Printing Ink Manufacturers' Associations (E/CN.2/CONF.5/R.83). In view of the highly technical nature of the study, in a field unfamiliar to the members of the Committee, the Committee decided to postpone any decision on the subject so that the document could be thoroughly studied by experts. It requested members and observers to send any relevant observations to the Secretariat before the end of 1968.
- 118. The Committee unanimously expressed its thanks to the European Committee of Paint and Printing Ink Manufacturers! Associations for having prepared the study, and requested the Secretariat to convey its thanks to that Committee.

 Labels for Class 7
- 119. The Committee took note of the communication from IAEA concerning the possibility of inserting the Class number of radioactive substances in the top corner of the label, above the trefoil (E/CN.2/CONF.5/R.90). It noted that IAEA would consider the question again on the occasion of a later revision of its Regulations.

Other questions relating to labels

120. The Committee took note of the communication in which the Government of Canada had proposed that consideration should be given to prescribing both a label for non-inflammable and a label for inflammable compressed gases and had suggested that one inflammable-solids label (Class 4) was adequate for transport purposes (E/CN.2/CONF.5/R.84, paragraph 5, pages 3 and 4). The Committee was of the

- opinion that, in particular for the reasons mentioned in paragraph 79 of the report on its fourth session (E/CN.2/CONF.5/16), there was no need to change the labelling system.
- 121. The comments of the Governments of the Federal Republic of Germany (E/CN.2/CONF.5/R.84, pages 5 and 6), Sweden (E/CN.2/CONF.5/R.84, page 12) and Switzerland (E/CN.2/CONF.5/R.84, pages 13 and 14) were considered at the same time as the proposal transmitted by the RID Safety Committee (see paragraphs 102 to 116 above).
 - APPROVAL OF THE REPORTS OF THE GROUP OF EXPERTS ON EXPLOSIVES AND OF THE GROUP OF RAPPORTEURS ON THE PACKING OF DANGEROUS GOODS
- 122. The Committee expressed its gratitude to the Group of Experts on Explosives and the Group of Rapporteurs on the Packing of Dangerous Goods for their contribution to its work; subject to the observations contained in the foregoing paragraphs, it approved the reports of the Group of Experts (E/CN.2/CONF.5/18 and 24) on its fifth and sixth sessions and the reports of the Group of Rapporteurs on its second, third and fourth sessions (E/CN.2/CONF.5/20, 22 and 26).

CONTACT WITH THE RID SAFETY COMMITTEE

123. In view of the decisions taken by the RID Safety Committee to embody the United Nations Recommendations in the "International Regulations concerning the Carriage of Dangerous Goods by Rail", the Committee suggested that, if the RID Safety Committee had any questions to raise concerning the classification of explosives or packagings, there was no reason why the observers from OCTI in the subsidiary bodies of the United Nations Committee should not include members of the RID Safety Committee.

OBSERVERS

124. The Secretariat announced that an organization of railway administrations was considering the possibility of attending the Committee's sessions. The Committee observed that the views of the railway administrations were suitably and properly expressed by OCTI.

FUTURE SESSIONS

- 125. The Committee agreed that its next session should be held in October 1969, and should take up approximately ten working days.
- 126. It agreed that the sessions of its subsidiary bodies should be arranged approximately as follows:

	<u>1967</u>				
	September	Group of Rapporteurs on the Packing of Dangerous Goods	5 w	orking	days
	1968				
	February/March	Group of Experts on Explosives	5	11	11
	11 11	Group of Rapporteurs on the Packing of Dangerous Goods	8	11	11
	August	Group of Rapporteurs on the Packing of Dangerous Goods	8	11	11
	1969				
	February/March	Group of Experts on Explosives	5	**	17
	11 11	Group of Rapporteurs on the Packing of Dangerous Goods	8	11	n
•	early August	Group of Rapporteurs on the Packing of Dangerous Goods	5	T†	11
	tt 11	Joint session of the Group of Experts on Explosives and the Group of Rapporteurs on the Packing of Dangerous Goods	3	11	11

127. The Committee agreed that the timetable was tentative and was subject to change in the light of progress in the work.

ANNEX

PROPOSALS FOR AMENDMENTS TO ITEMS IN THE LISTS IN ANNEX 1 TO THE RECOMMENDATIONS (ST/ECA/81/Rev.1) AND FOR THE INSERTION OF NEW ITEMS

This Annex is in four parts:

- Part 1. Proposals affecting Part I of Annex 1 to document ST/ECA/81/Rev.1 (Vol.I)
- Part 2. Proposals affecting Part II of Annex 1 to document ST/ECA/81/Rev.1 (Vol.II)
- Part 3. Proposals affecting Part III of Annex 1 to document ST/ECA/81/Rev.1 (Vol.III)
- Part 4. Proposals affecting Appendix 1 to Annex 1 to document ST/ECA/81/Rev.1 (Vol.III)

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page 2
          Proposals affecting Part I of Annex 1 to document ST/ECA/81/Rev.1
Part 1.
Page 22
8/1900
          Delete this item
Page 23
          Column (d), read : "1.3"
1/17
Page 25
          Insert the following:
8/1730
          Antimony pentachloride
                                          Pentachlorure d'antimoine
          (Antimony perchloride)
                                         (Perchlorure d'antimoine),
          liquid
                                           liquide
          Antimony pentachloride,
8/1731
                                          Pentachlorure d'antimoine
          in solution
                                           en solution
Page 26
          Read first item as follows:
          Antimony perchloride, see
          "Antimony pentachloride ..."
          - 8/1730
6/1552)
8/1730)
          Delete these items
8/1731)
Page 27
6/1558
          Delete this item
Page 45
          Insert the following new item:
          Charges, propellant, for
1/242
                                            Charges propulsives pour 1.3 +
          cannon*, PE, MFH
                                            canons, PP, RIV
Page 52
          Replace "(HE^{\pm})" (English side) and "(EDT^{\pm})" (French side) respectively by:
1/72
          "containing, by weight, at
                                            "contenant, en poids, au moins
                                            15% d'eau ou au moins/10% de flegmatisant (EDT*)1"
          least 15% water or at least 10% phlegmatiser (HE*)
          Add the following footnote:
          The transport of this substance when it contains less water or less
          phlegmatiser than mentioned above should be prohibited except with special
          authorization granted by the competent authorities. Small samples, how-
          ever, may be carried irrespective of the water or phlegmatiser content
          as items of Sub-division 1.2.2."
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E/CN.2/CONF.5/28

Annex

1/226	Replace "(HE)" (English side) and "(EDT)" (French side) respectively by		
	"containing, by weight, at least 15% water or at least 10% phlegmatiser* (HE*)1/"	"contenant, en poids, au 1 15% d'eau ou au moins 10% flegmatisant (EDT)1'"	noins de
<u>l</u> /	$\sqrt{\text{Same footnote as for } 1/72}$		
Page 57			
1/75	Read the last line as follows:	•	7 /
	" at least 25% non volatile phlegmatiser1/"	" de flegmatisant non	volatil =/"
<u>1</u> /	Same amendment in the footnote	as in the $text$	
Page 59			
	Insert the following new item:		
6/2038	Dinitrotoluenes, solid	Dinitrotoluènes solides	6.1
Page 67			
	Insert the following new item:		
1/241	Explosives, blasting, Group E*	Explosifs de mine, groupe E [*]	1.1.2 +
Page 71			
4/1408	Amend the text and the footnote	to read as follows:	
	"Ferrosilicon, containing more than 30% and less than 90% silicon—	Ferrosilicium contenant plus de 30% et moins de 90% de silicium	
1/	This substance is not dangerous less than 90% silicon."	when it contains up to 30%	or not
Page 82		•	
1/120	Delete this item		
Page 84			
	Insert the following new item:		
2/2034	Hydrogen and methane, mixtures (inflammable compressed gas)	Hydrogène et méthane, mélanges (gaz comprimé inflammable)	2 3

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E/CN.2/CONF.5/28
Annex
page 4
Page 108
          Insert:
          Methane and Hydrogen,
          see "Hydrogen and methane ... " -
          2/2034
Page 117
3/1254
          Delete this item
Page 125
6/1666)
          Delete these items
6/1667)
Page 130
          Replace "(HE*)" (English side) and "(EDT*)" (French side) respectively by:
1/150
          "containing, by weight, at
                                            "contenant, en poids, au moins
                                            25% d'eau ou au moins 15% de flegmatisant (EDT*)1/"
          least 25% water or at least
          15% phlegmatiser (HE*)1
          Add the following footnote:
          The transport of this substance when it contains less water or less
          phlegmatiser than mentioned above should be prohibited except with special
          authorization granted by the competent authorities. Small samples, how-
          ever, may be carried irrespective of the water or phlegmatiser content
          as items of Sub-division 1.2.2."
Page 131
5/1480
          Add "2/" at the end of the text and the following footnote at the
          bottom of the page:
          Sodium perborate is not a dangerous substance."
5/1873
          The existing footnote 2/ (and the reference to it) to be renumbered "3/"
5/1533
          The existing footnote 3/ (and the reference to it) to be renumbered "4/"
Page 132
3/1269
          Delete this item
Page 135
8/1812
          Column (a), read: "6/1812"
          Column (d), read: "6.1"
```

Column (e), read: "8"

Page 143	Insert the following new item:	and the same of the same	
2/2037	Receptacles, small, containing inflammable compressed gas, not fitted with a dispersion device, not refillable	Récipients de faible capacité, emballage pe contenant des gaz comp inflammables et non mu de moyen de dispersion	rimés 2 nis
Page 144			
1/186	Add at the end:		
	",MFH"	",RIV"	
Page 150	en e		
1/234	Add "2/" at the end of the text bottom of the page:	and the following footn	ote at the
"2/	For small quantities - not excessibstance, containing at least to special provisions in respectivision 4.1."	10% water by weight, may	also, subject
8/1821	The existing footnote $2/$ (and the	ne reference to it) to b	e renumbered "3
Page 151			
8/1822) 5/1501)	Delete these items		
Page 160			
1 4 g C 100	Insert the following new item:		
2/2035	Trifluoroethane (in- flammable compressed gas)	Trifluoréthane (gaz comprimé inflammable)	2 3
Page 171	to the second of the second of		
	Insert the following new item:		
2/2036	Xenon (inert compressed gas)	Xénon (gaz comprimé inerte)	2

E/CN.2/CONF.5/28 Annex page 6

Part 2. Proposals affecting Part II of Annex 1 to document ST/ECA/81/Rev.1

CLASS 1

Division 1.1

Sub-division 1.1.2

Page 190

1/72 Replace "(HE*)" (English side) and "(EDT*)" (French side) respectively by:

"containing, by weight, at least 15% water or at least 10% phlegmatiser* (HE*)2/" "contenant, en poids, au moins 15% d'eau ou au moins 10% de flegmatisant* (EDT*)2/"

Add the following footnote:

"2/ The transport of this substance when it contains less water or less phlegmatiser* than mentioned above should be prohibited except with special authorization granted by the competent authorities. Small samples, however, may be carried irrespective of the water or phlegmatiser* content as items of Sub-division 1.2.2."

Page 191

1/226 Replace "(HE)" (English side) and "(EDT)" (French side) respectively by:

"containing, by weight, at least 15% water or at least 10% phlegmatiser* (HE*)1/"

"contenant, en poids, au moins 15% d'eau ou au moins 10% de flegmatisant* (EDT*)1/"

Add the following footnote:

"1/ The transport of this substance when it contains less water or less phlegmatiser* than mentioned above should be prohibited except with special authorization granted by the competent authorities. Small samples, however, may be carried irrespective of the water or phlegmatiser* content as items of Sub-division 1.2.2."

1/75 Read the last line as follows:

"... at least 25% non-volatile phlegmatiser 2/"

"... au moins 25% de flegmatisant non volatil 2/"

The existing footnote 1/ to be renumbered "2/" and amended in the same way as the text

Page 192

Insert the following new item:

1/241 Explosives, blasting, Group E*

Explosifs de mine, group E*

Page 193

1/120 Delete this item

Page 195 1/150 Replace "(HE*)" (English side) and "(EDT*)" (French side) respectively by: "containing, by weight, at "contenant, en poids, au moins 25% least 25% water or at least d'eau ou au moins 15% de flegmatisant* (EDT*) 1/" 15% phlegmatiser* (HE*)1/" Add the following footnote: The transport of this substance when it contains less water or less phlegmatiser* than mentioned above should be prohibited except with special authorization granted by the competent authorities. Small samples, however, may be carried irrespective of the water or phlegmatiser* content as items of Sub-division 1.2.2." 1/154 The existing footnote 1/ to be renumbered 2/Page 196 1/234 Add "1/" at the end of the text and the following footnote at the bottom of the page: "1/ For small quantities - not exceeding 17 1/2 oz (500 grammes) - this substance, containing at least 10% water by weight, may also, subject to special provisions in respect of packing, be classified in Division 4.1." Division 1.2 Sub-division 1.2.1 Page 205 1/17 Delete (transfer to Division 1.3)

Division 1.3

Page 215

Insert (transferred from Sub-division 1.2.1):

1/17 Ammunition, sporting*, NME Munitions de chasse et pour armes

de salon*, NME

Page 216

Insert the following new item:

1/242 Charges, propellant, for Charges propulsives pour canons*,

cannon*, PE, MFH PP, RIV

Page 219

1/186 Add at the end:

",MFH" ",RIV"

CLASS 2

Insert the following new items:

Page 227

2/2034 Hydrogen and methane, mixtures

(inflammable compressed gas)

Methane and hydrogen, see "Hydrogen and methane ..."-2/2034

Page 231

2/2037 Receptacles, small, containing

inflammable compressed gas, not fitted with a dispersion device, not refillable

Trifluoroethane (inflammable

compressed gas)

Récipients de faible capacité, emballage perdu, contenant des gaz comprimés inflammables et non

Hydrogène et méthane, mélanges (gaz 3

munis de moyen de dispersion

comprimé inflammable)

Trifluoréthane (gaz comprimé 3

inflammable)

Page 232

2/2035

Xenon (inert compressed gas) Xénon (gaz comprimé inerte) 2/2036

CLASS 3

Page 247

3/1254 Delete this item

. .

Page 249

3/1269 Delete this item

CLASS 4

Division 4.3

Page 270

Amend the text and the footnote to read as follows: 4/1408

> than 30% and less than 90% silicon 2/

"Ferrosilicon, containing more than 30% and less than 90% "Ferrosilicium contenant plus de 30% et moins de 90% de silicium 2/

This substance is not dangerous when it contains up to 30% or not less than 90% silicon" All Wallston

CLASS 5

Division 5.1

Page 278

Add "1/" at the end of the text and the following footnote at the bottom 5/1480 of the page:

Sodium perborate is not a dangerous substance."

Page 280 5/1501 Delete this item CLASS 6 Division 6.1 Page 296 6/1552 Delete this item Page 297 6/1558 Delete this item Page 301 Insert the following new item: Dinitrotoluènes solides 6/2038Dinitrotoluenes, solid Page 306 6/1666) Delete these items 6/1667) Page 307 Insert (transferred from Class 8): 6/1812 Potassium fluoride Fluorure de potassium CLASS 8 Page 320 Delete this item 8/1900 Read second column of 8/1730 as follows: Antimony perchloride, see "Antimony pentachloride..."-8/1730 8/1730) Substitute "Antimony" for "Antimonyl" 8/1731) Page 328 8/1812 Delete (transferred to Division 6.1)

Page 329 8/1822

Delete this item

E/CN.2/CONF.5/28 Annex page 10

Part 3. Proposals affecting Part III of Annex 1 to document ST/ECA/81/Rev.1

Page 348

17 Column (d), read: "1.3"

Colonne (d) lire: "1.3"

Page 353

72 Replace "(HE*)" by:

"containing, by weight, at least 15% water or at least 10% phlegmatiser* (HE*) 1/"
Add the following footnote:

"1/ The transport of this substance when it contains less water or less phlegmatiser* than mentioned above should be prohibited except with special authorization granted by the competent authorities. Small samples, however, may be carried irrespective of the water or phlegmatiser* content as items of Sub-division 1.2.2."

75 Read the last line as follows:

"... at least 25% non-volatile phlegmatiser 2/"

The existing footnote 1/ to be renumbered "2/" and amended in the same way as the text

Ajouter à la fin :

"contenant, en poids, au moins 15% d'eau ou au moins 10% de flegmatisant* (EDT*) 1/"

Insérer le renvoi suivant :

le transport de cette matière,
lorsqu'elle contient moins d'eau
ou moins de flegmatisant* qu'indiqué
ci-dessus, devrait être interdit
sauf permission spéciale délivrée
par les autorités compétentes.
Toutefois, les petits échantillons
pourront être transportés, quelle
que soit la teneur en eau ou
flegmatisant*, comme faisant
partie de la subdivision 1.2.2."

Lire à la fin :

"... au moins 25% de flegmatisant non volatil 2/"

2/ Le renvoi 1/doit être renuméroté 2/ (même correction que dans le texte)

Page 357

120 Delete this item

Supprimer

Page 360

150 Replace "(HE*)" by:

"containing, by weight, at least 25% water or at least 15% phlegmatiser* (HE*) 1/"

Add the following footnote:

"I/ The transport of this substance
when it contains less water or
less phlegmatiser* than mentioned
above should be prohibited
except with special
authorization granted by the
competent authorities. Small
samples, however, may be
carried irrespective of the
water or phlegmatiser* content
as items of Sub-division 1.2.2."

Ajouter à la fin :

"contenant, en poids, au moins 25% d'eau ou au moins 15% de flegmatisant* (EDT*) 1/"

Ajouter le renvoi suivant :

Le transport de cette matière lorsqu'elle contient moins d'eau ou meins de flegmatisant* qu'indiqué ci-dessus, devrait être interdit sauf permission spéciale délivrée par les authorités compétentes. Toutefois, les petits échantillons pourront être transportés, quelle que soit la teneur en eau ou flegmatisant*, comme faisant partie de la subdivision 1.2.2."

Page 364

186 Add at the end:

Page 367

226 Replace "(HE)" by:

"containing, by weight, at least 15% water or at least 10% phlegmatiser* (HE*) 1/"

Add the following footnote:

"1/ The transport of this substance when it contains less water or less phlegmatiser* than mentioned above should be prohibited except with special authorization granted by the competent authorities. Small samples, however, may be carried irrespective of the water or phlegmatiser* content as items of Sub-division 1.2.2."

Ajouter à la fin : ".RIV"

Ajouter à la fin :

"contenant, en poids, au moins 15% d'eau ou au moins 10% de flegmatisant* (EDT*) 1/"

Ajouter le renvoi suivant :

"1/ Le transport de cette matière lorsqu'elle contient moins d'eau cu moins de flegmatisant* qu'indiqué ci-dessus, devrait être interdit sauf permission spéciale délivrée par les authorités compétentes. Toutefois, les petits échantillons pourront être transportés, quelle que soit la teneur en eau ou flegmatisant*, comme faisant partie de la subdivision 1.2.2."

E/CN.2/CONF.5/28 Annex page 12

Page 369

234 Add "4/" at the end of the text and Ajouter le "4/" à la fin du texte avec the following footnote at the bottom le renvoi suivant : of the page:

"4/ For small quantities - not exceeding 17 1/2 oz (500 grammes) - this substance, containing at least 10% water, by weight, may also, subject to special provisions in respect of packing, be classified in Division 4.1"

114/ Pour de petites quantités - ne dépassant pas 500 grammes - cette matière, lorsqu'elle contient au moins 10%, en poids, d'eau et lorsqu'elle est soumise à des conditions spéciales d'emballage, peut aussi être classée dans la division 4.1"

Page 370

Add the following new items:

241 Explosives, blasting, Group E*

Charges, propellant, for cannon*, PE, MFH

Ajouter les nouvelles rubriques :

Explosifs de mine, groupe E* 1.1.2 +

Charges propulsives pour canons*, 1.3 PP. RIV

Page 398

1254 Delete this item

Supprimer

Page 399

1269 Delete this item

Supprimer

Page 410

1408 Amend the text and the footnote to read as follows:

> "Ferrosilicon, containing more than 30% and less than 90% silicon 1/

This substance is not dangerous when it contains up to 30% or not less than 90% silicon"

Modifier le texte et le renvoi comme suit :

"Ferrosilicium contenant plus de 30% et moins de 90% de silicium 1/

Cette matière n'est pas dangereuse lorsqu'elle contient 30% au plus de silicium ou au moins 90% de cette matière"

Fage 414

1480 Add "1/" at the end of the text and the following footnote at the bottom le renvoi suivant : of the page:

Sodium perborate is not a dangerous substance."

Ajouter le "1/" à la fin du texte avec

Le perborate de sodium n'est pas une matière dangereuse"

Page 415	January Brazilian and Artifacture	
1501 Delete this item	Supprimer	
Page 421		
1552 Delete this item	Supprimer	
Page 422		
1558 Delete this item	Supprimer	
Page 429		
1666) 1667) Delete these items	Supprimer	
Page 433		
1730) Replace "Antimonyl" by "Antimony"	Texte français inchange	e e e e e e e e e e e e e e e e e e e
Page 438		
1812 Column (d), read: "6.1" Column (e), read: "8"		
Page 439		
1822 Delete this item	Supprimer	
Page 445		
1900 Delete this item	Supprimer	
Page 455 Add the following new items:	Ajouter les nouvelles rubriques :	
2034 Hydrogen and methane, mixtures (inflammable compressed gas)		2 3
2035 Trifluoroethane (inflammable compressed gas)	Trifluoréthane (gaz comprimé inflammable)	2 3
2036 Xenon (inert compressed gas)	Xénon (gaz comprimé inerte)	2
2037 Receptacles, small, containing inflammable compressed gas, not fitted with a dispersion device, not refillable	Récipients de faible capacité, emballage perdu, contenant des gaz comprimés inflammables et non munis de moyen de dispersion	2
2038 Dinitrotoluenes, solid	Dinitrotoluènes solides	6.1

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Part 4. Proposals affecting Appendix 1 to Annex 1 to document ST/ECA/81/Rev.1

Page 471

CHARGES, PROPELLANT, FOR CANON
Insert the following sentence after
"... propellant explosive.":
"Some present a major fire hazard."

Page 475

Insert a new description:
"EXPLOSIVES, BLASTING, GROUP E
These blasting explosives, which must contain neither nitroglycerin, nitroglycol, ammonium nitrate nor chlorates, are mixtures of organic nitrated compounds and combustible materials such as hydrocarbons and aluminium powder. Included in this group are plastic explosives."

CHARGES PROPULSIVES POUR CANONS
Insérer après "... dépassant 19,1mm."
la phrase suivante :
"Certaines présentent un risque d'incendie violent."

"EXPLOSIFS DE MINE, GROUPE E
Ces explosifs de mine, qui ne doivent
renfermer ni nitroglycérine, ni nitroglycol,
ni nitrate d'ammonium, ni chlorates,
sont des mélanges de composés nitrés
organiques et de matières combustibles
telles que hydrocarbures ou poudre
d'aluminium. Ce groupe comprend les
explosifs plastiques."