#### **DANGEROUS GOODS PANEL**

#### Dubai, 31 March to 4 April 2003

# Agenda Item 2: Development of recommendations for amendments to the Technical Instructions for incorporation in the 2005/2006 edition

#### REFORMATTING OF PACKING INSTRUCTIONS

(Presented by J. Abouchaar)

#### 1. **INTRODUCTION**

Considerable progress has been made the the experts from the UK and the US in rationalising and reformatting of the Technical Instructions' packing instructions. The importance of this work cannot be understated since the most critical requirement shippers must adhere to is the selection and proper use of packaging. In considering the results of the packing instruction working group to date, it is appropriate to take into consideration the "user-friendliness" of the proposed new formatting. For example, in aiming to reduce the overall number of packing instructions, it should be recalled that the purpose of the packing instruction format is to group "families" of substances with similar hazard, physical and chemical properties since these require similar packagings.

Taking the particular example of the flammable liquid packing instructions. It is noted that in the case of 3X3, the format for inner packagings retains UN number specific row entries. It can be seen from the table that there are three groups of UN numbers in this table:

- Those that are not permitted in IP2 inner packagings.
- Those that are not permitted on Passenger Aircraft
- Those for which IP2 and PAX aircraft are permitted

It is suggested that rather than 1 packing instruction, three separate packing instructions are indicated. This will have the following advantages:

- Different packing instructions are used for substances with significantly different packaging requirements. This allows for simpler future amendments. In addition, users will be directed to the applicable packaging information more quickly.
- In addition, the table itself, is more user-friendly and will be more efficiently and accurately used.
- The table is considerably more easier to keep accurate by the author.
- The simpler table format is simpler to produce, this not only speeds production but reduces the likelihood of errors.

• The various table formats across the packing instructions will be simpler and more uniform. This results in all packing instructions being easier to maintain and produce.

Please note, for the purposes of this paper, the differences in quantities have been ignored. It is believed that a full assessment of these relative values is required in order to establish whether there is a substantive difference in hazard between the various UN numbers.

## 2. **PROPOSAL**

The Panel experts are invited to comment and recommend that the Packing Instruction working group be asked to take note of the comments with respect to user-friendliness and the number of packing instructions and to continue its excellent work.

## Combined portions of PI 304, 306, and 308

## **BX3** PACKING INSTRUCTION 3X3

3X3

The general packing requirements of Part 4, Chapter 1 must be met.

Combination packagings with inner plastic packagings and single outer plastic packagings are not permitted for PG I liquids.

## **COMBINATION PACKAGINGS:**

## **INNER:**

The following inner packagings are authorized for the indicated volumes for passenger or cargo aircraft. A dash indicates the packaging is not permitted.

Glass or Earthenware (IP1)			Plasti	c (IP2)	Metal (IP3)	
UN No.	Passenger	Cargo	Passenger	Cargo	Passenger	Cargo
1089	-	.5 L	-	-	-	2.5 L
1196	.5 L	1.0 L	.5 L	1.0 L	.5 L	1.0 L
1204	.5 L	1.0 L	.5 L	1.0 L	.5 L	1.0 L
1250	-	.5 L	-	-	-	1.0 L
1298	.5 L	1.0 L	.5 L	1.0 L	.5 L	1.0 L
1723	.5 L	1.0 L			.5 L	1.0 L
1921	.5 L	.5 L	-	-	.5 L	1.0 L
2270	.5 L	1.0 L	-	-	.5 L	2.5 L
2356	.5 L	.5 L	-	-	1.0 L	2.5 L
2456	.5 L	.5 L	-	-	1.0 L	2.5 L
2478	.5 L	1.0 L	.5 L	1.0 L	.5 L	2.5 L

These materials were separated into a separate instruction due to the significant differences in inner quantity limits from those materials assigned to PI 3X2. However, further review could lead to additional consolidation through rationalizing the limits based on similar hazards.

The UN numbers and proper shipping names assigned to PI 3X3 are:

UN#	ICAO PSN	CLASS	PG	SUB-R	PASS PI	CARGO PI
UN1089	ACETALDEHYDE	3	I		FORBIDDEN	304
UN1250	METHYLTRICHLOROSILANE	3	I	8	FORBIDDEN	304
UN1921	PROPYLENEIMINE, INHIBITED	3	I	6.1	306	304
UN2356	2-CHLOROPROPANE	3	I		306	304
UN2456	2-CHLOROPROPENE	3	I		306	304
UN1196	ETHYLTRICHLOROSILANE	3	II	8	306	304
UN1204	NITROGLYCERIN SOLUTIONIN	3	II		306	308
	ALCOHOL					
UN1298	TRIMETHYLCHLOROSILANE	3	II	8	306	304
UN1723	ALLYL IODIDE	3	II	8	306	304
UN2270	ETHYLAMINE, AQUEOUS	3	II	8	306	308
	SOLUTION					
UN2478	ISOCYANATES, FLAMMABLE,	3	II	6.1	306	308
	TOXIC, N.O.S.*					