



International Civil Aviation Organization

DGP/24-WP/21
6/8/13

WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-FOURTH MEETING

Montréal, 28 October to 8 November 2013

Agenda Item 4: Development of recommendations for amendments to the *Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods* (Doc 9481) for incorporation in the 2015-2016 Edition

DRAFT AMENDMENTS TO THE EMERGENCY RESPONSE GUIDANCE FOR AIRCRAFT INCIDENTS INVOLVING DANGEROUS GOODS

(Presented by the Secretary)

SUMMARY

This working paper contains consequential draft amendments to the *Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods* (Doc 9481) to reflect the decisions taken by the UN Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals at its sixth session (Geneva, 14 December 2012).

The DGP is invited to agree to the draft amendments in this working paper.

Section 4

CHART OF DRILLS AND LIST OF DANGEROUS GOODS WITH DRILL REFERENCE NUMBERS

Amend Tables 4-2 and 4-3 as indicated:

UN 3507, **Uranium hexafluoride, radioactive material, excepted package** is assigned to Class 8 with a Class 7 subsidiary risk. The DGP Guidance Document (see extract in the appendix to this document) does not currently include a drill code letter intended for substances with a Class 7 subsidiary risk. The panel is invited to consider whether drill code “8L” is sufficient for UN 3507.

| <i>UN No.</i> | <i>Drill Code</i> | <i>Proper shipping name</i> |
|---------------|-------------------|---------------------------------------------------------------------|
| <u>3507</u> | <u>8L</u> | <u>Uranium hexafluoride, radioactive material, excepted package</u> |
| <u>3508</u> | <u>9L</u> | <u>Capacitor, asymmetric</u> |
| <u>3509</u> | <u>9L</u> | <u>Packaging discarded, empty, uncleaned</u> |
| <u>3510</u> | <u>10L</u> | <u>Adsorbed gas, flammable, n.o.s.</u> |
| <u>3511</u> | <u>2L</u> | <u>Adsorbed gas, n.o.s.*</u> |
| <u>3512</u> | <u>2P</u> | <u>Adsorbed gas, toxic, n.o.s.*</u> |
| <u>3513</u> | <u>2X</u> | <u>Adsorbed gas, oxidizing, n.o.s.*</u> |
| <u>3514</u> | <u>10P</u> | <u>Adsorbed gas, toxic, flammable, n.o.s.*</u> |
| <u>3515</u> | <u>2PX</u> | <u>Adsorbed gas, toxic, oxidizing, n.o.s.*</u> |
| <u>3516</u> | <u>2CP</u> | <u>Adsorbed gas, toxic, corrosive, n.o.s.*</u> |
| <u>3517</u> | <u>10CP</u> | <u>Adsorbed gas, toxic, flammable, corrosive, n.o.s.*</u> |
| <u>3518</u> | <u>2PX</u> | <u>Adsorbed gas, toxic, oxidizing, corrosive, n.o.s.*</u> |
| <u>3519</u> | <u>2CP</u> | <u>Boron trifluoride, adsorbed</u> |
| <u>3520</u> | <u>2PX</u> | <u>Chlorine, adsorbed</u> |
| <u>3521</u> | <u>2CP</u> | <u>Silicon tetrafluoride, adsorbed</u> |
| <u>3522</u> | <u>10P</u> | <u>Arsine, adsorbed</u> |
| <u>3523</u> | <u>10P</u> | <u>Germane, adsorbed</u> |
| <u>3524</u> | <u>2CP</u> | <u>Phosphorus pentafluoride, adsorbed</u> |
| <u>3525</u> | <u>10P</u> | <u>Phosphine, adsorbed</u> |
| <u>3526</u> | <u>10P</u> | <u>Hydrogen selenide, adsorbed</u> |

APPENDIX

EXTRACT FROM DANGEROUS GOODS PANEL GUIDANCE DOCUMENT

PART 11 - EMERGENCY RESPONSE GUIDANCE

11.1 Emergency Response Guidance

11.1.1 The Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods (Doc 9481 AN/928) is amended to reflect changes to the list of dangerous goods. The amendment cycle follows that for the Technical Instructions.

11.1 Assignment of emergency response drill codes

11.1.1 Drill codes are assigned to the entries for dangerous goods in the *Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods* on the basis of the following criteria.

(a) Drill Code Number

The drill code number assigned is the number of the UN class into which the substance or article has been placed, except that:

- (i) the drill code number 10 is assigned to flammable gases in Division 2.1 and to toxic gases having a subsidiary risk 2.1, with all other gases being assigned the drill code number 2;
- (ii) the drill code number 11 is assigned to infectious substances in Division 6.2;
- (iii) flammable solids (ie: Division 4.1 substances) are assigned the drill code number 3; drill code number 4 being reserved for spontaneously combustible and water-reactive substances (ie: those in Divisions 4.2 and 4.3); and
- (iv) articles and substances classified in Division 1.4S are assigned to drill code number 3.

(b) Drill Code Letter

- (i) Code letters C, F, P, and X - are assigned to articles and substances required to bear a Corrosive, Flammable, Toxic or Oxidizer subsidiary risk label, respectively.

(Note - the code letter P is also assigned to toxic gases in Division 2.3)

- (ii) Code letter E - is assigned to articles and substances to which Special Provision A 215 has been assigned in Table S-2-6 and to desensitised explosives classified in Division 4.1, Packing Group I.
- (iii) Code letter H - is assigned to liquids with a high risk of ignition by virtue of having a FP below 0°C. For "nos" or other generalised entries in Class 3, where a separate line entry is

presented for packing groups I and II or for all three packing groups, the drill code letter H is indicated for both PG I and II entries, since even the substances falling into PG II may have flash points below 0°C. If an "nos" or other generalised entry in Class 3 has only a PG II or III line entry, the H is not indicated for the PG II entry since the flash points would be expected to be relatively high, as evidenced by the absence of a PG I entry.

(Note - the H drill code letter is not assigned to Class 3 entries only. It is also assigned to liquids having a flash point below 0°C and which are classified in a Class or Division that precedence over Class 3 (eg: a highly ignitable liquid which has a PG I inhalation toxicity is assigned the drill code 6H)

- (iv) Code letter M - is assigned to Magnetized materials.
- (v) Code letter S - is assigned to self-reactive and related substances of Division 4.1 and organic peroxides of Division 5.2, which require temperature control in transport; and to solid substances having a subsidiary risk of 4.2; and to explosive articles and substances that are also pyrophoric.
- (vi) Code letter W - is assigned to any article or substance classified in Division 4.3 or having a subsidiary risk 4.3. Because of the effect of inhalation of a corrosive/toxic gas, it is also assigned to substances which react violently with water to produce corrosive/toxic gases (eg: Phosphorus pentachloride).
- (vii) Code letter Y – is assigned to infectious substances in Category A (UN 2841 and UN 2900).
- (viii) Code letter Z – is assigned to lithium batteries to identify to flight crew that the cargo fire suppression system may not extinguish or contain a fire.
- (ix) Code letter A, i and N - are assigned subjectively to articles and substances for which none of the above code letters apply and which exhibit anaesthetic, irritating (tear-producing) or noxious properties, respectively.
- (x) Code letter L - is assigned when no other code letter applies to articles and substances having no subsidiary risk and to all articles and substances classified in Division 1.4S.

(Note - the L drill code letter does not necessarily mean that the substance to which the code is assigned is of a low hazard, only that there is little or no risk in addition to that indicated by the basic drill code number. For example, a flammable gas in Division 2.1 would have the drill code 10L assigned. Clearly, such a gas could be very dangerous on an aircraft, but the code letter L only indicates that there is no hazard in addition to that indicated in the Inherent Risk column of Table 4-1 of Doc 9481 for the drill number 10)

11.1.2 Not more than 2 drill code letters are used in the drill code. In order to ensure this, it may be necessary to ignore a lesser risk of a substance having multiple hazards which may, however, require multiple subsidiary risk labels. For example **Chlorosilanes, water reactive, flammable, corrosive, nos** are required to be labelled with a Danger if wet primary hazard label and subsidiary risk labels for Liquid flammable and Corrosive; the drill code assigned, however, is **4FW** rather than **4CFW**.