

DANGEROUS GOODS PANEL (DGP)**NINETEENTH MEETING****Montreal, 27 October to 7 November 2003**

Agenda Item 3: Resolution, where possible, of the non-recurrent work items identified by the Commission or the panel

3.3 Dangerous goods guidance material for security personnel

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**DEVELOPMENT OF SECURITY STANDARDS FOR DANGEROUS
GOODS TRANSPORTED BY AIR**

(Presented by R. Richard)

1. INTRODUCTION

1.1 As a result of the terrorist attacks on the World Trade Center and the Pentagon on September 11, 2001, and subsequent terrorist attacks, many governments and international organizations have undertaken a broad review of dangerous goods transportation security requirements. The United Nations Committee of Experts on the Transport of Dangerous Goods and the Globally Harmonized System of Labeling and Classification of Chemicals (UN COE) adopted security measures that are included in the 13th revised edition of the UN Model Regulations as a matter of urgency to address the potential misuse of dangerous goods by terrorists. Two years have passed since the September 11th event and terrorist actions continue to occur. World leaders are expecting that action be taken to combat terrorism on all fronts. Other modes of transport and national governments are taking action to incorporate dangerous goods security requirements. The dangerous goods security measures have been adopted in the RID/ADR/ADN and in the US Hazardous Materials Regulations (HMR). The International Maritime Organization (IMO) has adopted the text in principle, for final agreement at DSC8 (22 - 26 September).

1.2 In the wrong hands, dangerous goods pose a significant security threat. The objective of this paper is to address how best to incorporate the dangerous goods security measures that were adopted by the UN COE for the aviation mode of transport in the near term. The panel should consider whether it is more appropriate to incorporate the dangerous goods security measures into Annex 18 and the Technical Instructions or in Annex 17 at this time considering the fact that adoption of these requirements is a matter of urgency. Efforts to incorporate dangerous goods security measures should be coordinated with the AVSEC Panel. The objective of this paper is to provide information to the DGP to assist it in making a decision on

the placement of the dangerous goods security requirements and to propose amendments for incorporating the requirements in Annex 18 and the Technical Instructions should the Panel decide that this is the most appropriate alternative.

1.3 The ICAO Technical Instructions provides for a high degree of safety with respect to avoiding and mitigating unintentional releases of dangerous goods in transport. However, the Technical Instructions does not specifically address security issues related to minimizing the potential for theft or mis-use of dangerous goods which may endanger persons and property. As a result of the heightened concern with combatting terrorism it has become more apparent and accepted that security is a component of safety and that dangerous goods safety regulations need to address matters of security. The objectives of the dangerous goods security measures that were adopted by the UN COE (i.e. to minimize theft or misuse of dangerous goods that may endanger persons or property) are not entirely consistent with the objectives of the ICAO Security Manual (i.e. Safeguarding Civil Aviation Against Acts of Unlawful Interference). Nevertheless, the objectives are not conflicting and can be introduced within separate Annexes without creating adverse results. In this proposal a note is proposed for inclusion in the Technical Instructions to highlight that additional security measures are provided in Annex 17 and the Security Manual. The note also indicates that the dangerous goods security measures supplement the security measures intended to prevent acts of unlawful interference.

1.4 Following the decisions of the 33rd Session of the ICAO General Assembly and Resolution A33-1, Declaration on misuse of civil aircraft as weapons of destruction and other terrorist acts involving civil aviation and the outcome of the High-level, Ministerial Conference held on 19 and 20 February 2002 at ICAO Headquarters, an aviation security plan of action was developed and presented to the Council (C 166/3 and C 166/14). Included in the plan is "enhancement of Annex 17 and strengthening of security-related provisions in other Annexes to the Convention (Annex 1 - Personnel Licensing, Annex 6 - Operation of Aircraft, Annex 8 - Airworthiness of Aircraft, Annex 9 - Facilitation, Annex 11 - Air Traffic Services, Annex 14 - Aerodromes and Annex 18 - The Safe Transport of Dangerous Goods by Air)". Resolution A33-1 does not limit the adoption of security measures to Annex 17 and in the contrary acknowledges that other Annexes should be amended to address security measures. There is precedent for including security measures in other Annexes as long as they do not conflict with Annex 17. For instance, Annex 17 establishes general objectives for the security of cockpit doors while other ICAO Annexes (Annex-6 and Annex-8) contain specific standards.

1.5 While we agree that there needs to be acknowledgement of the dangerous goods security measures in Annex 17, there are a number of practical reasons why it would not be appropriate to incorporate them into Annex 17 in their entirety at this time. The following observations are offered for consideration by the Panel:

- a) Annex 17 is directed at the security of passenger aircraft and does not impose security requirements on cargo aircraft at this time. While most would agree that there is more work necessary to address cargo security for cargo aircraft operations, any changes to Annex 17 and the Security Manual will have to be discussed and approved through the full consensus of the AVSEC Panel. Some AVSEC Panel members may not be prepared to make these changes without further consideration based on a thorough review of the security measures that may or may not be needed for cargo aircraft operations. Although the AVSEC Panel has established a strategic objective to consider expanding Annex 17 to cover cargo aircraft operations, significant effort remains before this can be accomplished. The AVSEC Panel is dealing with a number of critical security issues including "certification" of security

screeners that may take precedence over dangerous goods security. The AVSEC Secretariat that attended the informal dangerous goods security information meeting held on September 3-4, in Montreal was unable to confirm whether many of the issues relevant to the incorporation of dangerous goods security measures in Annex 17 could be resolved during the next AVSEC Panel meeting scheduled for May 2004;

- b) Annex 17 does not apply to shippers. It is not practical to expand Annex 17 to all shippers simply to address dangerous goods general awareness training and other dangerous goods security shipper requirements when these requirements could simply be included in the Technical Instructions along with similar shipper requirements (e.g. general awareness safety training). If the requirements were included in Annex 17 they might not be as readily apparent to shippers;
- c) While Annex 17 is not a restricted document the Security Manual is restricted and although the issue of the manual being restricted would be discussed at the next panel meeting, there are some constraints placed upon its distribution. Shippers and carriers of dangerous goods are familiar with the requirements of the Technical Instructions. Considering that security and safety are closely related it makes sense to include all the dangerous goods requirements in a single location. This would result in a more user friendly approach;
- d) Annex 17 does not address the appropriate audience as compared to the Technical Instructions. The Technical Instructions addresses the complete transport chain including passenger and cargo aircraft operators and shippers. Expanding the scope of Annex 17 may be difficult and complex. To expand "Regulated agent" to include DG shipper might result in a major increase in unintended requirements being levied on shippers;
- e) Annex 18 and the Technical Instructions have a more desirable legal status (see Annex 18, para 2.2.1) since mandatory application applies and therefore it is more readily enforceable. Annex 17 and the Security Manual are recommended practices/guidance for States. There is a lag time between when items adopted in the Security Manual are adopted into national legislation and each State has the discretion to deviate from the requirements established;
- f) The timeliness of introducing the dangerous goods security measures will be more advantageous if the requirements are adopted in Annex 18 and the Technical Instructions. DGP/19 will meet Oct/Nov 2003 to recommend Technical Instructions amendments for applicability on January 1, 2005. AVSECP won't meet until May 2004 and may not reach conclusions on issues relative to successful implementation of dangerous goods security measures in Annex 17;
- g) Incorporation of the requirements in Annex 18 and the Technical Instructions would result in better consistency with other modes of transport. Other modal agencies have incorporated the requirements in their dangerous goods regulations. The Model Regulation format is consistently applied in the modal regulations (TI and IMDG Code as well as the European Road and rail regulations ADR/RID and some national regulations). Incorporating the dangerous goods security requirements in similar locations (paragraphs) within the various regulations results in greater consistency and in ensuring the intended audiences are informed of the requirements; and

- h) Incorporation of the requirements in Annex 18 and the Technical Instructions will result in ensuring that future amendments to the UN dangerous goods security requirements are incorporated for the aviation mode consistent with the UN amendments and with other modes of transport. AVSEC's revision cycle differs from the UN's (3 year cycle).

1.6 During the informal dangerous goods security information meeting held on September 3-4, in Montreal a representative from ICAO's legal staff indicated that there are no legal impediments that would prevent the DGP from incorporating dangerous goods security measures in Annex 18 and the Technical Instructions. He further indicated that the adoption of dangerous goods security requirements is within the scope of ICAO's authority consistent with Article 44 of the Chicago Convention and Council Resolution 33-1. He also confirmed that the Technical Instructions has mandatory application as compared to the recommendatory application of Annex 17 and that this should be a consideration in choosing the most appropriate annex for incorporation of the dangerous goods security requirements.

1.7 The security requirements adopted by the UN COE apply to shippers and carriers in all modes of transport. They are intended to minimize the potential for theft or mis-use that may endanger persons and property. Security training should be required for all shippers that offer dangerous goods for transport by aircraft and security plans should be developed by carriers that transport particularly sensitive dangerous goods. The Technical Instructions already addresses training requirements for shippers, carriers and other with responsibilities related to the safe transport of dangerous goods. Dangerous goods security plans apply to shippers, carriers and other with responsibilities related to the safe transport of dangerous goods when they transport high consequence dangerous goods. Dangerous goods experts are qualified to determine what should be considered as high consequence for purposes of requiring security plans. On the basis of the rationale offered in this paper Annex 18 and the Technical Instructions are best suited for incorporating dangerous goods security requirements at this time.

1.8 If the Panel agrees with the proposals below the secretariat should be requested to communicate the Annex 18 and Technical Instructions amendments to the AVSEC Panel with recommendations for amendments to Annex 17 to recognize the dangerous goods security requirements.

2. PROPOSAL

2.1 The Panel is requested to consider the following:

2.1.1 Appropriate security measures should take into account the fact that dangerous goods are currently classified by the inherent risk they pose while in transport. A chapter should be established in Annex 18 to the Chicago Convention and a new chapter (Chapter 1.5) should be established in the Technical Instructions for the Safe Transport of Dangerous Goods by Air to address security measures applicable to operators, shippers and others involved in the transport of dangerous goods aboard aircraft. It is proposed that Annex 18 be amended to address security measures applicable to dangerous goods as follows:

- a) In Chapter 1 a definition for dangerous goods security should be added as follows:

Dangerous goods security. For the purposes of this Annex dangerous goods security means measures or precautions to be taken to minimize theft or mis-use of dangerous goods that may endanger persons or property.

- b) A new Chapter 13 should be included as follows:

CHAPTER 13. DANGEROUS GOODS SECURITY PROVISIONS

2.1.2 Each Contracting State shall establish dangerous goods security measures applicable to shippers, operators, consignors and other individuals engaged in the transport of dangerous goods by air to be taken to minimize theft or mis-use of dangerous goods that may endanger persons or property. These measures should be commensurate with security provisions specified in other Annexes and the Technical Instructions.

2.1.3 The following text is proposed for incorporation in Part 1 of the Technical Instructions:

Chapter 5

DANGEROUS GOODS SECURITY

NOTE 1 – This Chapter provides requirements intended to address the security responsibilities of operators, shippers and others involved in the transport of dangerous goods aboard aircraft. It should be noted that Annex 17 provides comprehensive requirements for implementation of security measures by States to prevent unlawful interference with civil aviation, or when such interference has been committed. In addition the Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference (DOC 8973- Restricted) provides procedures and guidance on aspects of aviation security and is intended to assist States in the implementation of their respective national civil aviation security programs. The requirements in this Chapter are intended to supplement the requirements of Annex 17 and to implement measures to be taken to minimize theft or mis-use of dangerous goods that may endanger persons or property. The requirements of this Chapter do not supercede requirements of Annex 17 or the Security Manual.

Note 2 – States may apply additional security provisions which should be considered when offering or transporting dangerous goods.

2.2 General security provisions

2.2 All persons engaged in the transport of dangerous goods must consider security requirements for the transport of dangerous goods commensurate with their responsibilities.

2.3 Shippers must only offer dangerous goods to operators and operator representatives that have been appropriately identified.

2.4 Acceptance and storage sites, such as airside warehouses and other temporary storage areas must be properly secured and not be accessible to the general public.

2.5 Security Training

2.5.1 The training specified in 1;4.2 must include elements of security awareness.

2.5.2 Security awareness training must address the nature of security risks, recognising security risks, methods to address and reduce such risks and actions to be taken in the event of a security breach. It must include awareness of security plans (if appropriate) commensurate with the responsibilities of individuals and their part in implementing security plans.

Note – Persons that have received security training in accordance with the requirements of a National Security Plan or other security requirements that fulfil the elements of 5.2.2 need not receive additional training.

2.5.3 Such training must be provided or verified upon employment in a position involving dangerous goods transport and must be periodically supplemented with retraining.

2.5.4 Records of all security training undertaken must be kept by the employer and made available to the employee if requested.

2.6 Security Plans

2.6.1 Operators, shippers and others engaged in the transport of high consequence dangerous goods (see Table 1-5) must adopt, implement and comply with a security plan that addresses at least the elements specified in 5.3.2.

2.6.2 The security plan must comprise at least the following elements:

- a) specific allocation of responsibilities for security to competent and qualified persons with appropriate authority to carry out their responsibilities;
- b) records of dangerous goods or types of dangerous goods transported;
- c) review of current operations and assessment of vulnerabilities, including inter-modal transfer, temporary transit storage, handling and distribution as appropriate;
- d) clear statements of measures, including training, policies (including response to higher threat conditions, new employee/employment verification etc.), operating practices (e.g. access to dangerous goods in temporary storage, proximity to vulnerable infrastructure etc.), equipment and resources that are to be used to reduce security risks;
- e) effective and up to date procedures for reporting and dealing with security threats, breaches of security or security incidents;
- f) procedures for the evaluation and testing of security plans and procedures for periodic review and update of the plans;
- g) measures to ensure the security of transport information contained in the plan; and
- h) measures to ensure that the security of the distribution of transport documentation is limited as far as possible. (such measures must not preclude provision of transport documentation required by Part 5, Chapter 4 of these Instructions.).

Note:– Operators, shippers and others with responsibilities for the safe and secure transport of dangerous goods should co-operate with each other and with appropriate authorities to exchange threat information, apply appropriate security measures and respond to security incidents.

2.7 Table 1-5: INDICATIVE LIST OF HIGH CONSEQUENCE DANGEROUS GOODS

2.7.1 High consequence dangerous goods are those which have the potential for mis-use in a terrorist incident and which may, as a result, produce serious consequences such as mass casualties or mass destruction. The following is an indicative list of high consequence dangerous goods:

Class 1, Division 1.1 explosives
Class 1, Division 1.2 explosives
Class 1, Division 1.3 compatibility group C explosives
Division 2.3 toxic gases (excluding aerosols)
Division 6.1 substances of Packing Group I;
Division 6.2 infectious substances of Category A;
Class 7 radioactive materials in quantities greater than 3000 A1 (special form) or 3000 A2, as applicable, in Type B and Type C packages; and
Dangerous goods that are forbidden for transport on passenger and cargo aircraft as indicated in Table 3-1.

2.7.1 The following consequential amendment is also proposed:

27.2 In 1; 4.2.4 change the last sentence to read "The records of training must be made available upon request to the employee or the appropriate national authority.

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