



## DANGEROUS GOODS PANEL (DGP)

### TWENTY-NINTH MEETING

Montréal, 13 to 17 November 2023

**Agenda Item 2: Managing air-specific safety risks and identifying anomalies (Ref: REC A DGS 2025)**

**2.2: Develop proposals, if necessary, for amendments to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284) for incorporation in the 2025-2026 Edition**

### TRANSPORT OF ILLICIT SUBSTANCES UNDER CHAIN OF CUSTODY BY LAW ENFORCEMENT AGENCIES

(Presented by Sam Bitossi)

#### SUMMARY

This information paper aims at promoting discussions on the transport of illicit substances under chain of custody by law enforcement agencies. These discussions may help determine whether there are sufficient existing provisions in the International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air available to the States or whether additional provisions should be developed in the next biennium.

## 1. INTRODUCTION

1.1 The Civil Aviation Safety Authority (CASA) of Australia has received many requests (through the air operators and/or direct from Law Enforcement Agencies (LEAs)) for the transport of illicit substances (under chain of custody) by LEA officers for the purposes of initial laboratory testing or as evidence for prosecution (substance confirmed).

1.2 Illicit substances are predominantly Division 6.1, and include illegal drugs (such as cannabis, opiates, and certain types of stimulants), pharmaceutical drugs (such as analgesics (pain killers) and anaesthetic agents (Fentanyl) or veterinary anaesthetic agents (Carfentanil)) when used for non-medical purposes, and other substances used inappropriately (such as inhalants). Below is a list of illicit substances that the CASA has received applications for a State Exemption in recent year:

#	UN Number	Proper Shipping Name	Chemical / Other Name	Hazard Division	QTY
---	-----------	----------------------	-----------------------	-----------------	-----

1	UN 2811	<b>Toxic solid, organic, n.o.s.</b>	- Methamphetamine hydrochloride (“Ice” or “Crystal Meth”) - Cocaine hydrochloride (Cocaine) - (+/-) -3,4 Methylendioxyamphetamine hydrochloride (MDMA or Ecstasy) - Fentanyl (hydrochloride)	6.1	37g 105g 210g
2	UN 2810	<b>Toxic liquid, organic, n.o.s.</b>	- Methamphetamine dissolved in water	6.1	200ml (40 x 5ml vials)
3	UN 1544	<b>Alkaloids, solid, n.o.s. or Alkaloid salts, solid, n.o.s.</b>	- Cocaine hydrochloride (Cocaine) - Heroin	6.1	140g
4	UN 3249	<b>Medicine, solid, toxic, n.o.s.</b>	- Methamphetamine hydrochloride	6.1	
5	UN 1230	<b>Methanol solution</b>	- Carfentanil	3 (6.1)	

1.3 To assist the panel and facilitate discussion, the following is a summary of the various UN numbers that could be used to transport samples or illicit substances, including the requirements and Special Provisions for each extracted from Table 3-1. Dangerous Goods List (DGL) within the ICAO Technical Instructions:

UN# PSN	SP*	PG	Qty Restrictions	Comments
1544 Alkaloid salts, solid, n.o.s.*	A3, A5, A6	I,II,III	As per Table 3-1	Special Provision A5 – Solids inhalation toxicity of PG I forbidden on Passenger Aircraft.
1544 Alkaloid solid, n.o.s.*	A3, A5, A6	I,II,III	As per Table 3-1	Special Provision A5 – Solids inhalation toxicity of PG I forbidden on Passenger Aircraft.
3315 Chemical sample, toxic	A106	I	Forbidden/Forbidden	Special Provision A106 requires that this UN number can only be used for the transport of Chemical Weapons. If this UN number/SPA was broadened, this could be an option as the substance is ‘assumed’ to meet the criteria for PG I for 6.1. Note: In the Supplement, UN 3315 is limited in quantity to 25g per package.
3243 Solids containing toxic liquid, n.o.s.*	A50	II	As per Table 3-1	Perhaps this UN number could be used for classification of illicit substances, if presented under certain circumstances.
3287 Toxic liquid, inorganic, n.o.s.*	A3, A4, A137	I,II,III	As per Table 3-1	Special Provision A4 – Vapour inhalation toxicity of PG I forbidden Passenger & Cargo Aircraft, Mist inhalation toxicity of PG I forbidden on pax. Special Provision A137 – UN Number can not be used when vapour inhalation toxicity of PG I.
2810 Toxic liquid, organic, n.o.s.*	A3, A4, A137	I,II,III	As per Table 3-1	Special Provision A4 – Vapour inhalation toxicity of PG I forbidden Passenger & Cargo Aircraft, Mist inhalation toxicity of PG I forbidden on pax. Special Provision A137 – UN Number cannot be used when vapour inhalation toxicity of PG I.
3288 Toxic solid, inorganic, n.o.s.*	A3, A5	I,II,III	As per Table 3-1	Special Provision A5 – Solids inhalation toxicity of PG I forbidden on Passenger Aircraft, Note: The entry in the DGL for “Drugs, toxic, liquid, n.o.s.” refers to UN3288.
2811 Toxic solid, organic, n.o.s.*	A3, A5	I,II,III	As per Table 3-1	Special Provision A5 – Solids inhalation toxicity of PG I forbidden on Passenger Aircraft, Note: The entry in Table 3-1 for “Drugs, toxic, liquid, n.o.s.” refers to UN2811.

\* Note – Extracted Special Provisions provided within Appendix A to this paper.

## 2. DISCUSSION POINTS

2.1 Maintaining the chain of custody with respect to evidence is the most critical part of evidence documentation as this is to assure the courts of law that any evidence presented in a case is authentic, remains untampered with and is the same evidence that was seized at the scene of the crime. As part of the chain of custody, LEA Officers require evidence to remain in their presence during transport,

which in turn, ensures that the integrity of the evidence cannot be refuted in a court of law. To achieve a proper chain of custody, the substances must be kept in the possession of the LEA Officer and therefore transported in the cabin of the aircraft on flights as part of their carry-on baggage allowance.

2.2 The alternative option requires an LEA Officer to escort the evidence airside (accompanied by a representative of the operator) so that they may witness the loading/unloading of the package carried as cargo. This is problematic as once the evidence leaves the possession of the LEA Officer, it should be signed over to an authorised person as part of the continuity of the chain, otherwise the integrity of the evidence could be questioned in court. Additionally, upon arrival, the LEA Officer must be present for the opening of the hold which is difficult to achieve when an aircraft utilises an aerobridge to offload passengers and the ground handling staff may not necessarily be aware of the situation (for security reasons).

2.3 There are also legal obstacles which can prevent illicit substances from being in the possession of persons who are not legally authorised to carry them. Many States have laws (often entitled “Misuse of Drugs Act” or “Controlled Substances Act”) which makes it illegal for illicit substances to be in the possession of baggage handlers, or under the control of pilots, or anyone who does not have the legal authority or delegation to have possession of them. In cases where laws prevent this, the LEA Officers are not legally allowed to surrender drugs to the baggage hold, even if it is technically possible under their supervision.

2.4 Each State has its own requirements with respect to the standard of the testing of illicit substances in order to achieve a successful prosecution. Some States do not recognise testing conducted in laboratories from another country, and as such, request that the illicit substances be transported back to the country of origin to be tested in preparation for prosecution. This presents many problems with respect to the classification of an illicit substances, which in many cases, may have been manufactured in a ‘backyard’ or make-shift laboratories, and not manufactured to any medical standard.

2.5 Substances that are unable to be formally classified onsite may be subject to field tests containing chemical reagents (such as “Nik Tests”) used to indicate the presence of an illicit substance. Questions have been raised by our Inspectorate as to whether these field tests are satisfactory for the purposes of the initial classification of the substance in preparation for air transport, this is because the field tests are only an indicator and are not of the standard that a spectrum analyser can achieve for proper classification. For example, illicit substances seized in remote locations that are then required to be transported by air to an authorised test facility or laboratory (most likely in a major city), so that further tests can be undertaken to verify and confirm the chemical breakdown of the substance. This places the civil aviation authorities in a precarious situation, whereby issuing an exemption (without a proper classification) is largely based on information provided by LEA Officers in the field.

2.6 Additionally, the quantities of the illicit substances that are being requested for transport back to the State in which they originated from are quite variable in quantities, ranging from grams or millilitres up to several kilograms per flight. In some instances, the illicit substances have been discovered concealed within items that cannot be extracted without destruction of the evidence and therefore must be transported in situ. This often results in larger shaped or heavier packages than what would normally be permitted for carriage in the cabin of an aircraft.

2.7 Currently, there are no provisions within the ICAO Technical Instructions and its Supplement that easily facilitate the transport of illicit substances by law-enforcement agencies within the cabin of an aircraft other than by way of issuing State Exemptions. State Exemptions requires the approval of the State of Origin, Operator, Destination, Transit and States of Overflight, which is

problematic for several reasons, particularly for a country like Australia, where a technical stop is required in most instances and many countries are overflowed in the course of an international journey. Taking into consideration the security of the packages carried, and the time and effort required to ensure safe passage, the requirement for the LEA to gain multiple Exemptions from other States whilst engaging several air operators, is often unachievable.

2.8 Another complexity is the variance in the illicit substance itself, more specifically, the different forms they can present in (i.e. crystallized, powdered, solid and liquid forms). One particular substance that is causing a major concern is the substances Fentanyl and Carfentanil due to its highly toxic vapours, particularly in the event of leakage within a confined space such as an aircraft hold or inside the cabin.

2.9 In light of the information presented, Australia has considered whether a new Special Provision could be developed that facilitates the carriage of illicit substances as part of the passenger provisions for a LEA Officer when travelling for official duty (perhaps taking a similar approach to that of Special Provision A106 in relation to chemical samples carried by authorised person of the Organization for the Prohibition of Chemical Weapons).

### 3. **DISCUSSION**

3.1 The DGP is invited to consider the information provided in this paper and share their own experiences within their State, particularly regarding any methodologies deployed to facilitate the transport of such substances by air whilst maintaining chain of custody.

3.2 The DGP is invited to comment on whether the development of a new special provision that links into Table 8-1, could be considered as an option that can be further explored in the new biennium.

---

APPENDIX

Table 3-2. Special provisions

TIs	UN
...	
A3	(223) If the chemical or physical properties of a substance covered by this description are such that, when tested, it does not meet the established defining criteria for the class or division listed in column 3, or any other class or division, it is not subject to these Instructions.
A4	Liquids having a vapour inhalation toxicity of Packing Group I are forbidden on both passenger and cargo aircraft.  Liquids having a mist inhalation toxicity of Packing Group I are forbidden on a passenger aircraft. They may be carried on cargo aircraft providing they are packed in accordance with the packing instructions for the Packing Group I substance and the maximum net quantity per package does not exceed 5 L, except where the limit specified in column 13 of Table 3-1 is less than 5 L, in which case the limit specified in column 13 applies. Transport in accordance with this special provision must be noted on the dangerous goods transport document.
A5	Solids having an inhalation toxicity of Packing Group I are forbidden on passenger aircraft. They may be carried on cargo aircraft providing they are packed in accordance with the packing instructions for the Packing Group I substance and the maximum net quantity per package does not exceed 15 kg. Transport in accordance with this special provision must be noted on the dangerous goods transport document.
A6	(43) When offered for carriage as pesticides, these substances must be carried under the relevant pesticide entry and in accordance with the relevant pesticide provisions (see 2;6.2.3 and 2;6.2.4).
...	
A50	(≈217) Mixtures of solids which are not subject to these Instructions and toxic liquids may be transported under this entry without first applying the classification criteria of Division 6.1, providing there is no free liquid visible at the time the substance is packaged and, for single packagings, the packaging must pass a leakproofness test at the Packing Group II level. This entry must not be used for solids containing a Packing Group I liquid.
...	
A106	This entry may only be used for samples of chemicals taken for analysis in connection with the implementation of the Chemical Weapons Convention.  They may be transported on a passenger or cargo aircraft providing prior approval has been granted by the appropriate authority of the State of Origin or the Director General of the Organization for the Prohibition of Chemical Weapons and providing the samples comply with the requirements shown against the entry for chemical samples in Table S-3-1 of the Supplement.  The substance is assumed to meet the criteria of Packing Group I for Division 6.1. Subsidiary hazard labelling is not required.  A copy of the document of approval showing the quantity limitations and the packing requirements must accompany the consignment.  <i>Note.— The transport of substances under this description must be in accordance with chain of custody and security procedures specified by the Organization for the Prohibition of Chemical Weapons.</i>
...	
A137	(315) This entry must not be used for Division 6.1 substances that meet the inhalation toxicity criteria for Packing Group I described in 2;6.2.2.4.3.
...	