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Patrick Juneau
Chief, Safety Policy and International Engagement Division (TDG-SPIED)
330 Sparks St., Tower C, Ottawa ON
K1A 0N5

June 18, 2016

Via Email: patrick.juneau@tc.gc.ca

Mr. Juneau:

Please accept the following responses to your follow-up questions with respect to Transport Canada’s follow-up questions on the changes to Part 12 of the TDGR.

HAC Response to Transport Canada’s Part 12 Questions:

Other than ammunition, which dangerous goods are transported by your members under subsection 12.4(1) of the TDGR?

HAC Response:

Our members do not transport any items other than the Class 1.4S items listed in the regulation. In the majority of these situations, this would be long gun ammunition for use in support of activities such as bear over-watch during remote exploration, seismic or pipeline activities.

Which criteria should, in your view, be used to define “limited access”?

HAC Response:

We believe the base criteria used to define a “Limited Access” location should be:

“A location where there is no reliable or readily available means of access other than by air, regardless of seasonable access provided by ice roads or waterways.”

*When dangerous goods are transported under section 12.9, is it primarily for:
Cost savings (for the operator or the shipper)?*

HAC Response:

There are no appreciable cost savings for the operator or shipper.

Transporting dangerous goods by helicopter is one of the most expensive means of transport. It is usually used only if the situation is either time sensitive or other means of accessing a location are impractical.

There are no sizable cost differences for an operator regarding training or operational procedures.

Time savings?

HAC Response:

Transportation by air is often the quickest means of transport for clients with expensive or time sensitive operations.

For the operator, there is a minimal difference in time to deal with documentation or proper procedures, especially as the industry migrates to electronic tools.

Dangerous goods that are prohibited for transport by air under the International Civil Aviation Organization’s Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI)?

HAC Response:

This is true in some situations. There are situations where an item - for example, propane or heating fuel, is required to be transported to a remote location such as an exploration camp, along with other personnel making the same trip.

Ability to transport greater quantities per means of containment?

HAC Response:

This is true for Class 3 Flammable Liquids, such as Aviation Fuel, Gasoline or Diesel Fuel used to refuel aircraft, generators, snowmobiles, etc. used in remote locations.

Use of means of containment other than those required under the ICAO TI?

HAC Response:

Useful for small volume containers of Class 2 and Class 3 items. Some usage of non-UN certified fiberboard boxes, etc.

Labelling and/or marking requirements other than those required under the ICAO TI?

HAC Response:

Not a significant difference.

Other, e.g. reduced requirements for shipping documents?

HAC Response:

Proper documentation, rather than reduced documentation, is really the issue.

In most situations, the pilot-in-command is the individual either loading or supervising the loading of their aircraft. In the helicopter world it is usually a closer relationship between the pilot and the aircraft's contents, than it is with a larger fixed-wing cargo aircraft.

At present, the reduced documentation requirements for 12.9 operations is probably more beneficial to the shipper, rather than the operator.

If more than one of the above are reasons for transporting dangerous goods under section 12.9, would it be possible to provide examples?

Could you provide us with list of means of containment used under the limited access provisions (section 12.9)?

HAC Response:

The most often encountered means of containment for 12.9 transport are:

- Steel and Plastic Fuel Drums of various sizes.
- Small Volume (25L and less) Steel and Plastic Fuel Containers

- Gas Cylinders of various sizes
- Fiberboard Boxes
- Wooden Boxes and Crates

In your view, under which circumstances would it be necessary or appropriate to allow shipments prepared under 12.9 to be transported from traditional “non-remote” airports prior to their departure to their final destination?

HAC Response:

Unsure of the question. Please re-state.

Which dangerous goods are shipped from remote locations to non-remote locations?

HAC Response:

Usually these are items left over from a remote operation that will eventually be returned to a client’s warehouse or forwarded to another operational area. Examples would be empty, full or partially full fuel containers and gas cylinders, portable vehicles or gas-powered equipment, and any other un-used or recoverable items from a remote location.

What is the current practice for transporting consumer commodities by air? Y963 is very specific to products in certain classes for the purpose of personal care or household use. Could you identify which members use 12.8 today for general domestic transport and why they need to use section 12.8, rather than following the ICAO TI?

HAC Response:

Y963 is sometimes used to transport consumer items such as cleaning supplies, lubricants, solvents, paints, adhesives, etc. that will be used in a remote location, such as a base camp.

These items may be an individual item or a package of mixed items. Often they are store bought items that are not being shipped in case lot quantities and are for a customer’s use, not the operator’s.

Some examples are:

- Aerosol paints for marking locations
- Waterproof paint for a rain-proofing
- A can of WD40 for lubricating items
- A package of 2-part epoxy for repairing an item
- Containers of Bug Repellant

A concern is that the contents of a sealed package marked 'Air Transport, 12.8, Consumer Commodity' does not need to be identified, however a NOTOC is required for transport. It would be a better consideration for the shipper to have to provide a document listing the contents of the package, so the dangerous goods content would be known.

How often are core samples transported by your members under section 12.11?

HAC Response:

It depends upon the situation. Operators working with the Oil and Gas or Mining Exploration sectors may carry samples as part of their normal operation. We will not have an accurate number until we complete a survey with our membership later this year.

Do HAC members transport measuring instruments under section 12.13? If so, which instruments do they transport under this section?

HAC Response:

Some of our members may transport some items for non-destructive testing purposes, but few if any operate these items in the air. We will not have an accurate number on this until we complete a survey with our membership later this year.

Which dangerous goods are transported by medical crews under section 12.14? If unknown, could you provide us with the contact information of medical crews to whom we could put this question?

HAC Response:

This regulation is usually only used by emergency air evacuation flights; as most daily HEMS work is performed by dedicated Air Ambulance operators.

However, Oxygen tanks would probably be the most common DG item that would be flown in an emergency medical service situation.

For more specific information, you may wish to contact the following operators performing contract or dedicated HEMS services:

- Canadian Helicopters (Quebec)
- HeliJet (Vancouver)
- ORNGE (Ontario)
- STARS (Alberta)

How often is 12.14 used? Which dangerous goods are returned to origin? Are dangerous goods returned with or without medical staff?

HAC Response:

This is best addressed to the operators listed above.

Could you identify the types of dangerous goods that would be part of a “Spares Kit”?

HAC Response:

A separate list of potential items in a Spares Kit can be found at the end of this document.

How do HAC members transport their “Spare kits” today? Do they meet the requirements of section 12.8?

HAC Response:

It depends. Some of the basic items are “off-the-shelf” items that meet the requirements of TDGR 12.8 as a consumer item. Others, such as a Nitrogen kit for engine testing requires transport as a fully regulated item.

However, the regulations under which they are transported vary. Some operators may carry them as 12.8 items, while others may carry them as fully regulated items with a Shipper’s Declaration. Most carry them as a kit packed in a secure container, itemized and documented for contents, complete with NOTOCs.

This is an item that is similar in operational requirement to the portable fuel pump, and is a current subject of a discussion within the industry regarding proper requirements for safe handling and transport.

Are "Spares Kits" always present in the helicopter?

HAC Response:

Spares Kits are not always on an aircraft, but they are frequently carried.

They usually accompany an aircraft when it will be based in a remote location for an extended period of time. The items in the spares kit allow essential maintenance to be carried out in the field. This kit would be carried on the aircraft during this away period, as it moves between locations. Much like a portable fuel pump, it is considered an essential piece of field equipment for operational and safety purposes.

Some operators might carry a small maintenance kit on a daily basis that may contain a few items such as plastic cleaner, lubricants, sealant, Alkaline Batteries, and duct tape to manage an unforeseen concern in the field.

Thank-you for the opportunity to comment.

If you have any other questions, we would be pleased if you would contact this office.

Regards,



Fred L. Jones BA LLB
President & CEO

Cc Vern Bush, SOLOCKS.COM Training Inc.

Possible Spares Kit Items

Preliminary Listing

Item	UN Number	Proper Shipping Name	Class	Hazard	QTY	Notes
210 Plastic Cleaner (Sumner)	UN1950	Aerosols, Flammable	2.1 (6.1)	Flamm. Gas	312 g	
Alkaline Batteries (AAA,AA etc) -Dry Cell					12	
Brake Cleaner	UN1950	Aerosols, non-flammable, containing substances in Division 6.1	2.1 (6.1)	Non-Flamm. Gas and Toxic	539 g	
Brulin Formula 512	UN1760	Corrosive Liquids, n.o.s. (Ethanolamine, Potassium Hydroxide)	8	Corrosive	1 L	
Butane Fuel Refill	UN1011 UN2037	Butane	2.1 2.1	Flamm. Gas	78 g	
Camp Fuel	UN1268	Petroleum Distillates, N.O.S	3	Flamm. Liq.	4 L	
CFC Free Contact Cleaner	UN1950	Aerosols, Flammable	2.1	Flamm. Gas	312 g	
Connector Coating	UN1139	Coating Solution	3	Flamm. Liq.	55 ml	
Contact Cement	UN1133	Adhesives (containing Flamm. Liq.)	3	Flamm. Liq.	250 ml	
Contact Cement Thinner/ Cleaner	UN 1283	PAINT RELATED MATERIAL (Petroleum Distillates, Acetone, Toluene)	3	Flamm. Liq.	250 ml	
Epoxy Glue - 5 Min- Part A adhesive	UN3082	Environmentally Hazardous Substance, liquid N.O.S.(Bisphenol-A Epichlorhydrin resin)	9	Misc.	2.5 ml	

Epoxy Glue - 5 Min- Part B Hardener	UN2735	Amines, Liquid, Corrosive, N.O.S. (Aliphatic Amines)	8	Corrosive	2.5 ml	
Epoxy Glue - 5 min-Part 1 Resin - "Home Bond" /VIA CHEM VIA BOND	UN3082	Environmentally Hazardous Substance, liquid N.O.S.(Bisphenol-A Epichlorhydrin resin)	9	Misc.	2.5 ml	
Epoxy Glue - 5 min-Part 2 Hardener- "Home Bond" /VIA CHEM VIA BOND	UN3334	Aviation Regulated Liquid, N.O.S. (Polymercaptan)	9	Misc.	2.5 ml	
Jig-a-Loo	UN1950	Aerosols, Flammable	2.1 (6.1)	Flamm. Gas and Toxic	396 g	
Jig-a-Loo Dry Graphite	UN1950	Aerosols, Flammable	2.1	Flamm. Gas	311 g	
Kerosene	UN1223	Kerosene	3	Flamm. Liq.	4 L	
Lepage Superglue UltraGel	UN3334	Aviation Regulated Liquid, N.O.S.	9	Misc.	4 ml	
Loctite 406	UN3334	Aviation Regulated Liquid, N.O.S.	9	Misc.	20 g	
Mastinox 6846K (Yellow)	UN1263	Paint	3	Flamm. Liq.	120 ml	
Methyl Hydrate	UN1230	Methanol	3 (6.1)	Flamm. Liq. & Toxic	1L - 4L	
Methyl Ethyl Ketone (M.E.K.)	UN1193	Ethyl Methyl Ketone	3	Flamm. Liq.	1 L	
Motomaster Graphite Lube	Un1950	Aerosols, Flammable	2.1	Flamm. Gas	312 g	
Nitrogen Kit	UN1066	Nitrogen, Compressed	2.2	Non-Flamm. Gas		
Off Deep Woods aerosol Spray	UN1950	Aerosols, Flammable	2.1	Flamm. Gas	230 g	

Off Deep Woods Spray Insect Repellent 5	UN1993	Flammable liquid, n.o.s	3	Flamm. Liq.		
Paint Thinner	UN1268 UN1263	Petroleum Distillates, N.O.S Paint Related Materials	3 3	Flamm. Liq. Flamm. Liq.	4 L	
Prist Windscreen Cleaner	UN1950	Aerosols Flammable (contains Isopropanol, Propane, Butane)	2.1	Flamm. Gas	312 g	
ProSeal - Flamemaster Part A Class B (Type 2)					500 ml	
Proseal - Flamemaster Part B Class B (Type 2)					1 oz	
Tectyl 891 D, Class 2 (CPC 2)	UN1268	Petroleum Distillates, N.O.S.	3	Flamm. Liq.		
Tectyl 891 D, Class 1 (CPC 1)	UN1268	Petroleum Distillates, N.O.S.	3	Flamm. Liq.		
WD-40	UN1950	Aerosols, Flammable	2.1	Flamm. Gas	311 g	
Zinc Phosphate Primer - Valspar	UN1950	Aerosols, Flammable	2.1	Flamm. Gas	340 g	