



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

August 15, 2023

Mr. James F. Thornton  
Compliance Manager  
D.T. Gruelle Company Group LLC – FMC 012187N  
301 Moon Clinton Road  
Moon Township, PA 15108

Reference No. 22-0128

Dear Mr. Thornton:

This letter is in response to your November 28, 2022, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the transportation of cartridges, small arms by aircraft. Specifically, you ask whether “UN0012, Cartridges, small arms, 1.4S” is subject to the quantity limitations specified in United States (U.S.) Variation 13 of the International Civil Aviation Organization (ICAO) Technical Instructions.

The answer is no, provided “UN0012, Cartridges, small arms, 1.4S” meets the requirements specified in § 173.63(b) of the HMR. When a country's provisions vary from the ICAO Technical Instructions, those “variations” are published in Attachment 3, Chapter 1 as “State Variations.” Accordingly, for cargo limits for certain hazardous materials, U.S. Variation 13 states that, “Except for limited or excepted quantity materials, substances of Class 9, articles of UN0012, UN0014, or UN0055 meeting the requirements of 49 CFR 173.63(b).” Therefore, the quantity limitation established in U.S. Variation 13, paragraph (d)(1) does not apply to the materials described—including “UN0012, Cartridges, small arms, 1.4S.” Please note that although not subject to the limitation in U. S. Variation 13, paragraph (d)(1), the packaging limitation in Columns 9A and 9B of the § 172.101 Hazardous Materials Table (HMT) and the maximum gross weight limit of 30 kg per package apply under the provisions in § 173.63(b)(2).

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

T. Glenn Foster  
Chief, Regulatory Review and Reinvention Branch  
Standards and Rulemaking Division

**From:** INFOCNTR (PHMSA)  
**To:** Dodd, Alice (PHMSA); Hazmat\_Interps  
**Subject:** FW: Letter of Interpretation Request // IATA USG-13 & 49CFR  
**Date:** Tuesday, November 29, 2022 3:31:26 PM  
**Attachments:** image001.png  
 image002.png  
 image003.png  
 image004.png  
 image005.png  
 image006.png  
 image007.png  
 image008.png  
 image009.png  
 UN0012 Loi for Remington (2009).pdf  
 UN0012 DGR - Edition 63.pdf

Hello Alice and team,  
 Please see the LOI request below. Thanks.  
 -Rachel (HMIC)

**From:** James Thornton <thornton.james@dtgruelle.com>  
**Sent:** Monday, November 28, 2022 1:26 PM  
**To:** INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>  
**Cc:** Valmore Valiente <Valmore@dtgruelle.com>; Bill Waltonbaugh <Bill@dtgruelle.com>; Marco Gruelle <Marco@dtgruelle.com>; Jessica Sherry <Jessica@dtgruelle.com>; Barbara Bachurski <Barb@dtgruelle.com>  
**Subject:** Letter of Interpretation Request // IATA USG-13 & 49CFR

**CAUTION:** This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello Breanna and PHMSA team,

Great speaking with you on the phone today, Breanna! After some more fact finding, here is a more articulate request for a letter of interpretation with historical references.

**QUICK POINTS FOR ORIENTATION:**

1. Commodity in subject is UN0012 "Cartridges, small arms" (1.4s) (completed ammunition).
2. Mode of transportation in subject is air transportation on a passenger aircraft. On said passenger aircraft the cargo will be in the haul of the aircraft and considered inaccessible.
3. Regulations in subject:
  - a. 49CFR175.75(c) // This is referenced within "USG-13" in the IATA dangerous goods regulations, and "United States Variation 13" within International Civil Aviation Organization's (ICAO) Technical Instructions.
  - b. 49CFR173.63(b)
4. Attached references
  - a. 2009 Interpretation Letter 08-0287 to Remington Arms.
  - b. IATA packing Instructions 130

**ISSUE AND REQUEST FOR INTERPRETATION:**

DTGruelle, a freight forwarding company, would like to advise its clients, who are Shippers of UN0012 "Cartridges, small arms" (1.4s), on an updated interpretation regarding the following issue now that ORM-D is out of existence.

Much like Remington was experiencing in 2008, we are experiencing issues with airlines servicing the international market, as to their interpretation of United States variation US-13 (49CFR175.75(c)) appearing in the Technical Instructions of the International Civil Aviation Organization (ICAO).

The renewed problem is the loading restrictions placed on the number of packages containing hazardous materials permitted aboard passenger and cargo aircraft only, as stipulated in US-13 (49CFR175.75(c)). We are running into resistance with airlines willing to accept shipments of UN0012 "Cartridges, small arms" (1.4s) in quantities exceeding 25kg total which are not shipped as ORM-D due to their interpretation of US-13

Recognized facts of the matter:

1. ORM-D is no longer as of 01JAN2021.
2. UN0012 "Cartridges, small arms" (1.4s) is packaged in accordance with IATA Packing Instructions 130, which meets and is more restrictive than the requirements found within 49CFR173.63(b).
3. UN0012 "Cartridges, small arms" (1.4s) may be shipped as limited quantity or ORM-D material, as per 49 CFR 173.63(b)(1)(iii)(A)
4. "Limited quantity" varies depending on the mode of transportation and its corresponding dangerous goods regulations. In this case it is air-transport, and IATA does not allow for "Limited Quantity" for UN0012 "Cartridges, small arms" (1.4s)

We would like to challenge what we believe to be a misinterpretation of US-13 that the airlines are making in the absences of ORM-D. Although IATA does not recognize UN0012 "Cartridges, small arms" (1.4s) in limited quantity, US-13 and the referenced requirements within 49CFR173.63(b) are still very much being met; thus, when UN0012 "Cartridges, small arms" (1.4s) meets the requirements of 49 CFR 173.63(b), the 25kg limitation is not applicable, regardless of the absences of ORM-D. The only difference is that the packages will include 1.4s label, and not contain an ORM-D label.

List of things being met:

- I. 49 CFR 175.75(c)
  - a. The HAZMAT is UN0012
- II. 49 CFR 173.63(b)(1)
  - a. Is 1.4s, as per 49 CFR 173.63(b)(1)(i)
  - b. Meets the packing requirements of 49 CFR 173.63(b)(2)
  - c. Packages MAY be marked as Limited Quantity, as per 49 CFR 173.63(b)(1)(i)
  - d. Is Ammunition for rifle, pistol or shotgun, as per 49 CFR 173.63(b)(1)(iii)
- III. 49 CFR 173.27 Table 3
  - a. See note referencing a loop back to 49 CFR 173.63(b)

Thank you for your support and updated feedback now that ORM-D is no longer applicable.

REFERENCES

**USG-13(d)**

"Except for dangerous goods in Class 9, UN 0012, UN 0014 or UN 0055 also meeting the requirements of 173.63(b), articles of UN 3528 or 3529, dangerous goods in limited or excepted quantities, aircraft batteries transported as items of replacement (49 CFR 175.8) and those articles and substances considered to be dangerous goods under these Regulations but which are not subject to 49 CFR parts 171 – 180, the following limitations apply:

1. No more than 25 kg net weight of dangerous goods and in addition thereto, 75 kg net weight of non-flammable gas, that are permitted to be carried aboard a passenger aircraft may be loaded aboard an aircraft in an inaccessible manner."

#### 49 CFR 175.75(c)

For each package containing a hazardous material acceptable for carriage aboard passenger-carrying aircraft, no more than 25 kg (55 pounds) net weight of hazardous material may be loaded in an inaccessible manner. In addition to the 25 kg limitation, an additional 75 kg (165 pounds) net weight of Division 2.2 (non-flammable compressed gas) may be loaded in an inaccessible manner. The requirements of this paragraph (c) do not apply to Class 9, articles of Identification Numbers UN0012, UN0014, or UN0055 also meeting the requirements of 175.75(b)(2), articles of Identification Numbers UN3528 or UN3529, and Limited or Excepted Quantity material.

#### 49CFR173.63(b)

(b) **Limited quantities of Cartridges, small arms, Cartridges, power device, Cartridges for tools, blank, and Cases, cartridge, empty with primer.**

(1)

(i) Cartridges, small arms, Cartridges, power device (used to project fastening devices), Cartridges for tools, blank, and Cases, cartridge, empty with primer that have been classed as Division 1.4S explosive may be offered for transportation and transported as limited quantities when packaged in accordance with paragraph (b)(2) of this section. Packages containing such articles may be marked with either the marking prescribed in 173.27(a) or 173.27(b) and offered for transportation and transported by any mode. For transportation by aircraft, the package must conform to the applicable requirements of § 173.27 of this part. In addition, packages containing such articles offered for transportation by aircraft must be marked with the proper shipping name as prescribed in the § 172.101 Hazardous Materials Table of this subchapter. Packages containing such articles are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or is offered for transportation and transported by aircraft or vessel. Additionally, packages containing such articles are excepted from the requirements of subparts E (Labeling) and F (Placarding) of part 172 of this subchapter.

(ii) Until December 31, 2012, a package containing such articles may be marked with the proper shipping name "Cartridges, small arms" or "Cartridges, power device (used to project fastening devices)" and reclassified as "ORM-D-AIR" material if it contains properly packaged articles as authorized by this subchapter on October 1, 2010. Additionally, for transportation by aircraft, Cartridge, power devices must be successfully tested under the UN Test Series 6(d) criteria for reclassification as ORM-D-AIR material effective July 1, 2011. Until December 31, 2020, a package containing such articles may be marked with the proper shipping name "Cartridges, small arms" or "Cartridges, power device (used to project fastening devices)," "Cartridges for tools, blank," and "Cases, cartridge empty with primer" and reclassified as "ORM-D" material if it contains properly packaged articles as authorized by this subchapter on October 1, 2010.

(iii) Cartridges, small arms, Cartridges, power device (used to project fastening devices), Cartridges for tools, blank, and Cases, cartridge empty with primer that may be shipped as a limited quantity or ORM-D material are as follows:

- (A) Ammunition for rifle, pistol or shotgun;
- (B) Ammunition with inert projectiles or blank ammunition;
- (C) Ammunition having no tear gas, incendiary, or detonating explosive projectiles;
- (D) Ammunition not exceeding 12.7 mm (50 caliber or 0.5 inch) for rifle or pistol, cartridges or 8 gauge for shotshells;
- (E) Cartridges for tools, blank; and
- (F) Cases, cartridge, empty with primer.
- (G) Cartridges, power device (used to project fastening devices).

(2) Packaging for Cartridges, small arms, Cartridges for tools, blank, Cases, cartridge empty with primer, and eligible Cartridges, power device as limited quantity or ORM-D material must be as follows:

(i) Ammunition must be packed in inside boxes, or in partitions that fit snugly in the outside packaging, or in metal clips;

(ii) Primers must be protected from accidental initiation;

(iii) Inside boxes, partitions or metal clips must be packed in securely-closed strong outside packagings;

(iv) Maximum gross weight is limited to 30 kg (66 pounds) per package; and

(v) Cartridges for tools, blank, Cartridges, power devices which are used to project fastening devices, Cases, cartridge, empty with primer, and 22 caliber rim-fire cartridges may be packaged loose in strong outside packagings.

#### § 173.27 General requirements for transportation by aircraft.

Hazard class or division	Maximum authorized net quantity of each inner packaging		Maximum authorized net quantity of each outer package	Notes
	Glass, earthenware or fiber inner packagings	Metal or plastic inner packagings		
Class 1	Forbidden (See note)			See § 173.63(b) of this part for exceptions provided to certain articles of Division 1.4S.

Sincerely,

James F. Thornton

**Compliance Manager**

**D.T. Gruelle Company Group LLC – FMC 012187NF**

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C-TPAT Certified

China MOC-NVO5978

"D.T. Gruelle Company Group LLC ("D.T.G.") has opted to implement NVOCC Negotiated Rate Agreements ("NRAs") pursuant to the regulations of the Federal Maritime Commission ("FMC"). Please see DTG NRA Rules at [www.dtgruelle.com](http://www.dtgruelle.com). Please acknowledge your acceptance of this NRA rate by sending back an e-mail or FAX indicating explicit acceptance of the NRA. If you wish to sign the NRA, we can provide you with a written format of the NRA. Please advise. The NRA shall become effective upon receipt of your acceptance or as D.T.G and Customer may otherwise agree in writing."

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We stand with the people of Ukraine



DTGruelle, alongside our sister nonprofit DTCare, is committed to supporting those most impacted by the conflict. Click the links above for ways you can help.



U.S. Department  
of Transportation  
**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Ave., S.E.  
Washington, DC 20590

JAN 9 2009

Mr. Gregory D. Kehril  
World Wide Transportation Manager  
Remington Arms Company, Inc.  
870 Remington Drive  
P.O. Box 700  
Madison, NC 27025

Ref. No.: 08-0287

Dear Mr. Kehril:

This responds to your December 2, 2008, letter requesting clarification on the § 175.75 quantity limitations in the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) and United States (U.S.) Variation 13 in the International Civil Aviation Organization (ICAO) Technical Instructions regarding small arms cartridges shipped as Consumer Commodity, ORM-D materials. Specifically, you ask for verification that these ORM-D materials are not subject to the quantity limitations of § 175.75 in the HMR or U.S. Variation 13 in the ICAO Technical Instructions.

The answer is yes. Small arms cartridges shipped as ORM-D materials, as defined in § 173.144, are not subject to the quantity limitations in § 175.75 in the HMR or U.S. Variation 13 in the ICAO Technical Instructions.

I hope this answers your inquiry.

Sincerely,

Charles E. Betts  
Chief, Standards Development  
Office of Hazardous Materials Standards

# Remington®

Boothe  
§ 175.75  
§ 173.144  
Air  
08-0287

December 2, 2008

Ms. Hattie L. Mitchell  
Chief, Regulatory Review and Reinvention  
Office of Hazardous Materials Standards  
Pipeline and Hazardous Materials Safety Administration (PHMSA)  
Attn. PHH-12  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590-0001

**Subject:** 49 CFR 175.75 -- US Variance 13 (ICAO)

Dear Ms. Mitchell,

We are experiencing problems with the airlines servicing the international market, as to their interpretation of United States variation US 13 appearing in the Technical Instructions of the International Civil Aviation Organization (ICAO).

Specifically, the problem is the loading restrictions placed on the number of packages containing hazardous materials permitted aboard passenger and cargo aircraft only, as stipulated in US 13. The airlines fail to recognize that "Other Regulated Materials" are excepted from the limits imposed by this variance.

Remington Arms is a shipper of cartridges, small arms, 1.4S, UN 0012 that meet the requirements of §§ 172.316, 173.63 and 173.144. As such, this material is permitted to be reclassified and transported under the ORM-D hazard class. Our contention is that shipments of cartridges, small arms are not subject to the quantity limitations of variance US 13 as paragraph (d) excepts "Other Regulated Materials".

In reviewing D.O.T. interpretation #05-0106, we note that you issued a ruling stating that ORM materials, as defined in § 173.144, are permitted to be carried aboard aircraft without regard to the quantity limitations specified in § 175.75. We have informed the airlines as to the exception contained in § 175.75 and furnished them with a copy of your interpretation #05-0106. However, they will not accept these as proof that cartridges, small arms, classed as "Other Regulated Materials" are not subject to the any quantity limitations.

December 2, 2008  
Ms. Hattie L. Mitchell  
Page 2

For us to fix this problem they have requested that we obtain a statement from the D.O.T. attesting to the fact that cartridges, small arms, classed as an ORM-D material, are not subject to the quantity limitations specified in US 13 and therefore no quantity restrictions apply.

We shall appreciate your issuing such a statement. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read 'Greg Kehri', with a long horizontal flourish extending to the right.

Greg Kehri  
Worldwide Transportation Manager

**UN0012 Cartridges, small arms †**



Proper Shipping Name	Cartridges, small arms †
Description	
UN/ID Number	0012
Class/Div (Sub Hazard)	1.4S
Hazard Label(s)	Explosive 1.4
Packing Group	
Excepted Quantity ( <a href="#">see 2.6</a> )	E0
Special Provision(s)	<b>A802</b> Notwithstanding the absence of a packing group in column E, substances and articles assigned to these entries must be packed in UN Specification packagings that meet packing group II performance standards. This does not apply when aerosols are prepared for transport in accordance with the limited quantity provisions or for lithium batteries prepared in accordance with Section IB of Packing Instructions <a href="#">965</a> or <a href="#">968</a> .




	<b>Note:</b> <i>For the purposes of identification and documentation the packing group as shown in Table 4.2 applies and is to be used in the completion of the Shipper's Declaration, regardless of a packaging required to meet a higher packing group performance standard as indicated above.</i>
ERG Code	3L

Passenger and Cargo				Cargo Only	
Packing Instruction (Limited Quantity)	Max Net Quantity / Packaging (Limited Quantity)	Packing Instruction	Max Net Quantity / Packaging	Packing Instruction	Max Net Quantity / Packaging
<b>Forbidden</b>	<b>Forbidden</b>	<a href="#">130</a>	25 kg	<a href="#">130</a>	100 kg

**On Passenger and Cargo Aircraft**

Packaging Instruction: **130**

Max Net Quantity / Packaging: **25 kg**



## Packing Instructions — Class 1 — Explosives

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### PACKING INSTRUCTION 130

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STATE VARIATIONS: [AEG-08](#) [BEG-02](#) [BHG-02](#) [BHG-03](#) [CAG-13](#) [DQG-02](#) [EGG-01](#) [GBG-01](#) [GHG-02](#) [GHG-03](#) [HKG-03](#) [IDG-02](#) [ITG-05](#) [KGG-02](#) [MYG-03](#) [OMG-03](#) [SAG-04](#) [USG-05](#) [USG-13](#) [VCG-05](#) [YEG-06](#) [ZAG-01](#)

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OPERATOR VARIATIONS: [5X-01](#) [5X-04](#) [AA-01](#) [AH-02](#) [AI-01](#) [AM-01](#) [AS-02](#) [AT-03](#) [BR-03](#) [BW-01](#) [BZ-01](#) [CA-11](#) [D0-04](#) [D5-04](#) [ES-04](#) [FJ-02](#) [FX-01](#) [FX-04](#) [GA-12](#) [GF-01](#) [GF-02](#) [HA-01](#) [HM-01](#) [HM-02](#) [IG-01](#) [IR-04](#) [JU-02](#) [KC-02](#) [KL-01](#) [MD-04](#) [MH-11](#) [MK-03](#) [NO-03](#) [OU-11](#) [PL-01](#) [PR-01](#) [PZ-01](#) [QY-04](#) [SQ-01](#) [TU-01](#) [UA-01](#) [UL-03](#) [UX-04](#) [V3-01](#) [VN-05](#) [WR-03](#) [WS-03](#) [WY-02](#) [XK-01](#)

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This instruction applies to explosives on passenger aircraft and Cargo Aircraft Only.

The General Packing Requirements of Subsection [5.0.2](#), [5.1.0](#) and [5.1.1](#) must be met.

△ Unless otherwise provided for in these Regulations, packagings must meet Packing Group II performance standards.

*Inner packagings are not required.*

*Intermediate packagings are not required.*

Particular Packing Requirements or Exceptions:

The following applies to [UN 0006](#), [UN 0009](#), [UN 0010](#), [UN 0015](#), [UN 0016](#), [UN 0018](#), [UN 0019](#), [UN 0034](#), [UN 0035](#), [UN 0038](#), [UN 0039](#), [UN 0048](#), [UN 0056](#), [UN 0137](#), [UN 0138](#), [UN 0168](#), [UN 0169](#), [UN 0171](#), [UN 0181](#), [UN 0182](#), [UN 0183](#), [UN 0186](#), [UN 0221](#), [UN 0238](#), [UN 0243](#), [UN 0244](#), [UN 0245](#), [UN 0246](#), [UN 0254](#), [UN](#)

[UN 0280](#), [UN 0281](#), [UN 0286](#), [UN 0287](#), [UN 0297](#), [UN 0299](#), [UN 0300](#), [UN 0301](#), [UN 0303](#), [UN 0321](#), [UN 0328](#), [UN 0329](#), [UN 0344](#), [UN 0345](#), [UN 0346](#), [UN 0347](#), [UN 0362](#), [UN 0363](#), [UN 0370](#), [UN 0412](#), [UN 0424](#), [UN 0425](#), [UN 0434](#), [UN 0435](#), [UN 0436](#), [UN 0437](#), [UN 0438](#), [UN 0451](#), [UN 0459](#), [UN 0488](#), [UN 0502](#) and [UN 0510](#). Large and robust explosive articles, normally intended for military use, without their means of initiation or with their means of initiation containing at least two effective protective features, may be carried unpackaged. When such articles have propelling charges or are self-propelled, their ignition systems must be protected against stimuli encountered during normal conditions of transport. A negative result in Test Series 4 (*UN Manual of Tests and Criteria*) on an unpackaged article indicates that the article can be considered for transport unpackaged. Such unpackaged articles may be fixed to cradles or contained in crates or other suitable handling, storage or launching devices in such a way that they will not become loose during normal conditions of transport.

Where such large explosive articles are, as part of their operational safety and suitability tests subjected to test regimes that meet the intentions of these Regulations and such tests have been successfully undertaken, the appropriate national authority may approve such articles to be transported under these Regulations.

For [UN 0457](#), [UN 0458](#), [UN 0459](#) and [UN 0460](#), whenever loose explosive substances or the explosive substance of an uncased or partly cased article may come into contact with the inner surface of metal packagings (1A2, 1B2, 4A, 4B and metal receptacles), the metal packaging must be provided with an inner liner or coating.

**OUTER PACKAGINGS**

Type	Drums						Boxes							
Desc.	Steel	Alu- minium	Plywood	Fibre	Plastic	Other metal	Steel	Alu- minium	Wood	Plywood	Reconstituted wood	Fibreboard	Plastic	Other metal
Spec.	1A1 1A2	1B1 1B2	1D	1G	1H1 1H2	1N1 1N2	4A	4B	4C1 4C2	4D	4F	4G	4H1 4H2	4N